New Orleans Medical
and
Surgical Journal

Vol. 92 JUNE, 1940 No. 12

INAUGURAL ADDRESS*

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NEW ORLEANS

As you well know, this meeting is fittingly dedicated to our beloved and own Dr. Rudolph Matas, declared by the House of Delegates of the American Medical Association in June, 1938, to be America's most distinguished medical man and to be the first one to receive the distinguished service medal for "meritorious service in the science and art of medicine", an award given annually by the American Medical Association to the most worthy member of the medical profession.

The members of this society congratulate Dr. Matas and consider the American Medical Association fortunate to have had the privilege of conferring such an honor on such a distinguished individual with so many outstanding medical achievements, and the medical profession of Louisiana share in his glory and can only say that we are profoundly proud that our own great surgeon has been declared by a representative of every state in the union, to be, what we have always known him to be, the outstanding medical man in this country. Dr. Matas we salute you!

I appreciate very much the honor conferred upon me in my election as President of the Society. As I enter upon the discharge of my duties, I am mindful of my limitations and I shall rely largely upon your counsel and friendly suggestion. Of the cardinal virtues, faith, hope and charity, I believe I can claim the first as my own. As your President, I shall use largely this faith of mine in the hope that you will exercise your charity as to any shortcomings you may discover.

I would like, at the outset, to extend my congratulations to our outgoing President for his accomplishments.

It is quite a pleasure, I assure you, to have been elected president of this organization. I feel sure you have not elected me for what I have done in the past but for what you expect me to do in the future. I am happy as you can see and yet in the sunshine of happiness there comes a ray of seriousness, for I well realize that with this position, as with all duties of trust, there comes an obligation. I am sure the duties and responsibilities will be great, and, as I see it, I cannot possibly bear this burden alone. Therefore, I am now appealing to you, each and every member, for help and support. Even as Aaron of old held up Moses' hands, so do I expect you to hold up mine.

We want to practice the golden rule in our society as much as possible. However, we should not be satisfied with merely doing unto others as we would have them do unto us, or living to let live, but may we as a society live to help others live. If we apply this axiom to our own lives by putting our house in order first, then we will be able better to help our city, country, state or nation in a more ideal way.

As you know, our society is built on service—service to home, service to man,

*Read before the sixty-first annual meeting of the Louisiana State Medical Society, April 23, 1940.

and service to God. In carrying out these ideals of service to ourselves and one another, we unconsciously become one common happy family working for a common worthy cause.

We are engaged in worth while achievements. Our society has definite purposes and ideals. We have visions of accomplishments; and vision has ever been the guiding angel of mankind. Throughout history, it has always been the man of vision who has led. No progress has ever been made without it, and a nation's greatest assets are its men of vision, whether educators, statesmen, inventors, physicians or individualists.

Higher is a word of noble import. It is an impulse of tremendous lifting power. It lifts the soul of man from low and groveling pursuits to the achievements of high and great purposes.

Nothing else will so surely save one from failure as a complete surrender to a passion for excellence—to a lofty ideal. This is the steam engine. It is the pilot at the wheel.

Darwin's suggestion as to the evolution of the eagle is an instructive one. The desire to ascend was there before the wings, and through countless ages of development the process of formation and adaptation went on, until at last with mighty pinions the eagle soared aloft toward the sun.

Of this it may be said that every well meant trial and intention and effort is part of a great process. Each starts some feather and develops some muscle in the eagle's wing. It is he who aspires highly who highly achieves.

We must not spend our days waiting for an angel to deliver realized hopes at our door. We must go out and toil for them. I believe that the members of this society can help to bring better things to pass for our communities and for our state.

A boy once came to his father with some schoolwork that was proving to be too difficult for him to master. The father sent him back to try again. Later, going into his son's room to see how he was progressing, the father noticed some drops of water on the paper on which the boy was working. "What are these," asked the father, "Tears?" "No," replied the boy, "It's sweat!" We understand that we are not here to cry about the things we want accomplished but to work and even to sweat for them.

In each generation some of the best minds have devoted themselves to the study of the healing art. This will always be so. There is an allure to the practice of medicine which keeps the conscientious physician struggling on for his patient in the face of any difficulty. I like to believe that it is an inherent love of human kindness, which makes life's ultimate goal the universal brotherhood of man.

The practice of medicine has its origin in the far distant past. Primitive man, the ancient ancestor of the present generation, was a savage who roamed the earth, ignorant of the phenomena of his existence or of his surroundings. Fear of death was uppermost in his mind. He feared his fellow man, the wild beasts that inhabited the mighty forests, and fled in terror from such natural phenomena as thunder and lightning. He attributed all of his misfortunes, including disease, to evil spirits that in his imagination peopled the air about him. To protect himself from these evil spirits, he invented good spirits, charms, and mystic rites. In due time some one member of the clan or tribe appeared to be more successful than others in combating these evil influences. This man became the magician or medicine man of the clan. He was the progenitor of the physician.

Later, as primitive man became more enamored with the idea of good spirits aiding him in his fight against the evil ones, this medicine man became a priest who served the good spirits of the gods. Religion was therefore added to the practice of medicine. The origin of medicine was, therefore, mysticism, magic and religion. Primitive man believed that spirits inhabited all animate and inanimate objects. Some of these objects he thought contained good spirits, hence certain herbs and parts of certain animals were given to the patient in order that the good spirits

might enter into their bodies and drive out the evil ones that were causing disease.

As man's intelligence gradually increased in his desire better to protect himself from disease and its sequence, death, there were manifested other additions to this early art of medicine; namely, astrology and the science of numbers which were thought to influence his health. The numbers four, seven and thirteen were considered of especial importance. The rays of light from Luna, the moon, under certain conditions, were supposed to produce insanity, hence the designation "lunatic" was applied to an insane person. From these old beliefs we of the present generation have inherited superstition, such as belief that a child born at seven months was more likely to live than one born at eight months. Throughout many ages, the art of medicine was a mixture of religion, mysticism and magic.

About four hundred years before the birth of Christ there lived in Greece a physician whose name was Hippocrates. He became the greatest physician of his age. He was the first to recognize the error of mysticism, magic and religion in medicine. He taught that disease was cured by the natural powers of the body. He practiced bedside observation of symptoms, examined the secretions of the body, and investigated the digestibility of various foods. He established the practice of medicine on a rational basis. He also composed a code of ethics to govern the conduct of physicians. He declared that the true physician must be a man of honor, true to himself, and honorable in his dealing with all men. This ancient code is the basis for the present code of ethics that is in use today by the medical profession. In this day of many codes, we of the medical profession can point with pride to this ancient code of ours that has been a lamp to guide the members of our profession throughout all the centuries of the past.

Gradually the science of medicine progressed until today we find not a finished product but a system that has reduced the incidence of disease to a point that is nothing short of miraculous. The death rate from disease has dropped to 9.6 per 1,000, and nearly twenty years has been added to man's age expectancy. The number of newborn infants that may reasonably expect to reach maturity has been vastly increased. Trench after trench of man's great enemy, entrenched disease, has been taken in our war on that dread enemy of the human race. There remains much more to be done before disease will be under control.

During all of these centuries past, the physician has never faltered in his endeavor to serve suffering humanity.

The changing economic and social conditions present no less a challenge to the medical man than to the business man, the agriculturist and the industrialist. The Social Security Act brings additional responsibility to an already overburdened profession. This is a responsibility one cannot dodge if the public health and maternal and child welfare sections of the act are to be made workable for the best interests of the public and the profession. The spectre of national health insurance or socialized medicine will not down.

Many other problems of importance will arise from time to time, and we must be prepared to lend our assistance to their solution. The United States Public Health Service is now making an intensive fight on syphilis, and already we have been called upon to give our support. The American Society for the Control of Cancer has recently launched a campaign to enlist women of the United States in a Women's Field Army to combat cancer.

One need not qualify as a prophet, to be able to predict that, if the public health agencies, both national and state, would take the practicing physicians, who so nobly have taken care of the public, both rich and poor for these many centuries past, into their confidence, I am sure that by the mutual cooperation of both, the medical profession will go forward to a new high in service to the public.

With many new responsibilities and opportunities presented to the profession, let

us be prepared to give a good account of ourselves.

There is no doubt that the wise physician continues to study throughout his entire life. He budgets his time for reading, for the stimulation resulting from medical society meetings, for the investigation of puzzling problems and the writing of essays. Unless these four are combined some side of his professional fullness of life will be neglected and he will, in some way, restrict his field of usefulness.

The wise physician joins his county or parish society and regularly attends its meetings. At first, he is instructed but soon he assumes the role of instructor. He goes to his district branch meetings to widen his horizon of medical perspective. By active interest in the State Society he takes his logical place as a leader as soon as his skill is demonstrated, which may be by papers, by discussions, by scientific exhibits or participation in the postgraduate instruction courses. The State Society offers an open forum for the advancement of medical thought not only in these ways but also in its journal. With your help our journal can be made one of the most important reservoirs of current medical thought. To each and to every one of our state activities, I urge your attention and invite your active interest.

The American Medical Association meetings should be attended whenever possible. The addresses and scientific exhibits are the finest in the country and merit the careful consideration of all physicians. I ask your serious consideration of all phases of the American Medical Association activities.

The successful physician must be taught early in his life that in the knowledge of health and sickness is the power to care for the well and cure the sick. He must have an inquiring disposition, a retentive memory, and an inherent and trained ability to use all of his special senses to become a wise counsellor.

Perhaps your great-great-grandfather was a doctor, but he never attended a medical school. He was a blacksmith who bled people and pulled teeth. Perhaps your great-grandfather was a doctor and graduated from a Class A School in 1821. He bled and he blistered and he puked and he purged—and this was about his armamentarium. He did not even have ether or chloroform.

Perhaps your grandfather was a doctor and graduated from a Class A school in 1857. Bacteria were unknown. His appendicitis patients died of "cramp colic" and "locked bowels." He did not know that tuberculosis was communicable. He did not have a fever thermometer.

Perhaps your father was a doctor and graduated from a Class A Medical School in 1884. Diphtheria was rampant and deadly, and so was typhoid fever. He did not have vaccines for them, nor thyroid extract, nor adrenalin, nor pituitrin. Blood transfusion was unknown. He did not even have an x-ray. Radium had not been discovered. He did not have local anesthetics. He could not take a blood pressure. Pathologic and clinical microscopy were just beginning. He did not know that yellow fever was transmitted by mosquitoes, nor had he heard of hookworm.

Perhaps you as a doctor graduated from a Class A School in 1900. You did not even have insulin for diabetes, nor liver extract for pernicious anemia, nor scarlet fever serum, nor the malarial treatment for paresis, nor a host of other things. Insulin and liver extract, for instance, are both veritable epics in man's struggle against disease. The public, fed on mass production, wants an epic a week at least.

The time has come when the public should be informed regarding the qualifications of those who claim to be specialists in any department of medicine.

We are living in an age where the established order is being subjected to a critical examination in the crucible of economic unrest; when those untrained by experience and unqualified by mental inaptness render opinions obviously incompetent on one side and biased on the other.

Surely it is a sorry state of affairs when things pertaining to the actual practice of

medicine are left to those who have never had any contact with the sick except as statisticians and readers. When the rules or laws governing the health of the state are promulgated by those not associated in any way with the delivery of medical service, it is time for organized medicine to rebel.

On the air and in the press the self-appointed parade back and forth on the stage of medical service, first in one role and then in another but always cast in fanciful forms against the present day methods of practice. It is high time that we, the organized profession of the state, known to all as a most humane and honorable body protest against the activities of public servants preaching against us individually and collectively. Let us make a determined stand against all health agencies which capitalize illness and raise false standards of past and future achievements of medicine for their own advancement.

Let us break the chain of governmental usurpation of medical power which grew as an automatic process, one step leading to another until either by design or by chance we have arrived at the place where for the good of the people of this country we must rend it, for once it is broken the pernicious life-taking procedure will stop.

The rules for professional conduct are the basis of all our relationships with patients and physicians but morals begin with individuals and not societies. When the sense of right is once obtunded it always remains weakened. Getting money under false pretenses, fee splitting, almost always reduces the effectiveness of the recipient. Our regulations have been conceived and are enforced for the application of the all embracing golden rule to do unto others as you would have others do unto you. When everything seems to be doing badly, when pinched by necessity and shrouded in the darkness of adversity, the tempter appears with a demand for an improper operation, an untrue witness statement, a false affidavit or a divided fee. There is nothing which so destroys moral fiber and physical power as leading a dual existence. One cannot serve the god of medicine and the idol of ill-gotten gain at the same time for inevitably the influence of the latter controls action. We know that there are very few moral delinquents in our ranks but those few bring discredit upon the entire group and they should either give up their evil ways or get out of the society.

We the organized profession of the state are vitally concerned about anything which tends to reduce our efficiency. If we follow these precepts we will indeed be prepared physicians not only to care for the sick and to prevent illness but also to withstand the attacks of those who wish to make physicians mere servants and the public weak supplicants.

Recently an old ghost has reappeared in a new garb. I refer to so-called medical reviews, advertising journals and drug house reprints. Most of these are unethical. Do not keep them alive by allowing your good work, your success, to reach the profession through such channels.

Let us reconsecrate ourselves to the cause of medicine and rally to the saving standards of our rules of professional conduct.

Upon each and every one rest these obligations. We cannot, we must not falter in either for if we do an overwhelming catastrophe will overtake the practice of medicine and the protection it gives the public. Our responsibilities are many, our opportunities numerous and our heritage of medical example too sacred to be denied.

I am strong in my faith and firm in my convictions that organized medicine through the individual will meet the high professional standard and ethical plane for which I hope and you desire.

It was Osler who said to a group of students entering Johns Hopkins: "If you look forward to a lucrative practice, go home. If you enter medicine in exactly the same spirit that the missionary leaves for his foreign field, that is, believing that in medicine you best can use your talents for your fellow men, we welcome you."

In this day and age it is too much to expect doctors to have so fine a missionary

spirit as to be totally indifferent to money and the comforts and security it can buy. But it may still be assumed that a doctor who is worthy of the name will find his greatest reward in the satisfaction he derives from pursuing a science and from improving the lot of humanity. The fact that many doctors have placed these satisfactions first justifies the conclusion that this is not an impossible human ideal.

The majority of the medical profession are no doubt doing all that they can to raise the standards of medical practice. If there is a tinge of despair among some of the leaders, it is because the young men who are coming up, no matter how carefully they are selected from the thousands who apply for admission to the medical colleges, so often lack a medical conscience. The colleges are fully aware of the situation and are bending every effort to graduate only those students who are both mentally and morally fortified to practice medicine. But they can do no more than that. The future of the medical profession, in fact, depends upon the future of American manhood. If more parents teach their children, as they do today, that material success, rather than devotion to some science or art, is the end and aim of life, then we shall have fewer and fewer doctors who follow in the footsteps of Hippocrates and practice their art for the benefit of the sick.

Some of my hopes are:

1. That the renewed spirit of scientific service and medical self-instruction shall continue to develop;

2. That our medical colleges, because of this new spirit, may soon be enabled to have a cooperation of effort from the profession that will permit them to enlarge their postgraduate courses, in order that they might give fuller practical educational courses to those practitioners desiring them; and

3. That our members may in larger numbers avail themselves of the scientific and educational benefits offered by the society and ultimately become a profession, not only thoroughly and practically educated in modern scientific methods, but that, through the years, will continue to be up to date and fully competent and which, because of scientific training and special skill, will always be ready to serve, not only its own individual clientèle, but to render a larger service to the growing demands of an ever changing civilization.

May I say to you again, in concluding my remarks, that I am grateful for your undeserved honor and confidence.

When my life-work ceases, and my experiences are ended, I would ask for no better name than that of a humble physician, who here and there from the shore-points of life's ocean, has sent out a friendly beam, to brighten the darkness of someone's night, or to extend a helping hand in removing disease and suffering from the lives of humanity.

MEMORIAL ADDRESS*

J. P. MAUBOULES, M. D.
RAYNE, LA.

Fellow confrères of the Louisiana State Medical Society: Life, as we know, is very short and uncertain; therefore, we should be prepared at all times to meet the end. It reminds me of rainbows, coming from the earth, going up towards the sky, then curving again back to the earth. Some are very short, some are long and others much longer, and so is life.

When Dr. Couvillon, at our last meeting said, "O come and mourn with me a while," at that time no one but God knew that his name would be read at this meeting as one who had departed from this earth.

I believe all human beings on this earth should have a creed or faith in some religion; he who has none, in my opinion, could be compared to a man in a leaky boat in the middle of a deep sea.

Please stand with me as I read the names of our confrères who died during the past year:

Jackson J. Ayo, Jackson.

*Read before the sixty-first annual meeting of the Louisiana State Medical Society, April 22, 1940.

George S. Bel, New Orleans.
George R. Beridon, Opelousas.
William P. Buck, Jr., Kinder.
Arthur R. Carter, Mount Hermon.
Enoch McL. Causey, Franklinton.
Nash Collins, Delhi.
S. J. Couvillon, Moreauville.
John W. Craig, Many.
Harper L. Crow, Bossier City.
Francis O. Darby, Baton Rouge.
Leonhard E. Devron, New Orleans.
D. N. Foster, Franklin.
George R. Fox, Algiers.
Maurice J. Gelpi, New Orleans,
L. W. Holloman, Marksville.
J. E. Isaacson, New Orleans.
Robert C. Kemp, Baton Rouge.
Wilkes H. Knolle, New Orleans.
P. E. Magoun, Vidalia.
L. A. Masterson, New Orleans.
D. S. Perkins, Sulphur.
T. J. Perkins, Simmesport.
John L. Pittman, Palmetto.
J. Numa Roussel, New Orleans.
Amédée B. Granger, New Orleans.
James C. Sartor, Rayville.
E. E. Simpson, Shreveport.
Joseph E. Slicer, Shreveport.
Jacob A. Storck, New Orleans.
O. H. Thompson, Marion.
J. B. Vaughan, Monroe.
F. H. Walke, Shreveport.
David L. Watson, New Orleans.
Arthur Weber, New Orleans.
J. C. Wilkins, Bastrop.

May their departure from this earth give them eternal rest and peace in the other world.

ANGINA PECTORIS AND CORONARY THROMBOSIS*

WILLARD R. WIRTH, M. D.†
NEW ORLEANS

Angina pectoris and coronary thrombosis, as two distinct yet closely related entities due to coronary artery disease, deserve careful consideration, understanding and further study. According to the general conception they are both due to arteriosclerosis of the coronary arteries and are similar in some respects. Yet it is important to recognize their differences and differentiation. These diagnoses are being made correctly with increasing frequency, and whether or not this increase is real or apparent is a matter of personal opinion.

With the acceptance of the term angina pectoris as meaning a distinct clinical entity due to underlying sclerosis of the coronary arteries, one must be careful to exclude the use of the term as meaning pain over the heart. Such left sided chest pain may be due to a multitude of conditions and an attempt must be made to evaluate true thoracic pain to determine if it is really cardiac in origin.

Some of the conditions which may simulate angina pectoris because of the location or reference of the thoracic pain are as follows:

1. Referred nerve pressure pain: Such pains in the left thorax caused by cervical or upper thoracic arthritis, intercostal neuralgias or myalgias, herpes zoster, subdeltoid bursitis, diaphragmatic hernia, diseases of the pleura, lung or mediastinum, or diseases of the vertebrae or spinal cord.

2. Gastrointestinal conditions: Such organic conditions as gastric or duodenal ulcers, gallbladder or pancreatic lesions often cause referred pain into the thorax. Spastic conditions of the intestines themselves may be responsible. Again, a rather frequent so-called gastro-cardiac symptom complex, where certain gastrointestinal disturbances with abdominal distention and gastric flatulence produce an elevation of the diaphragm and apparently mechanically produce cardiac distress. This has been explained as being due to a twisting of the heart on its long axis as it is displaced upward with resulting coronary artery blood flow interference or more likely due to stretching of the peritoneum of the distended stomach. Since gastric disturbances are frequently prominent symptoms in angina

*Read before the Coast County Medical Society, Biloxi, Miss., March 6, 1940.

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pectoris and attacks are frequently related to meals, it is often very difficult to determine correctly the exact primary factor.

3. Aortic disease may produce thoracic pain. Syphilitic aortitis or aneurysm, dissecting aneurysm, rheumatic or mycotic aortitis may be responsible.

4. Severe anemia, because of the decrease of oxygen-carrying power of the blood, may produce pain simulating angina pectoris.

5. Cardiac neuroses producing chest pains are often troublesome. A typical picture may be presented.

6. Neurocirculatory asthenia, or the effort syndrome, may be associated with chest pain that requires differentiation.

7. Nicotine angina: In this condition pain in the region of the heart results from excessive use of tobacco in susceptible individuals.

8. Prolonged rapid heart pain occurring in hyperthyroidism, during emotional stress, or as a result of abdominal distention.

9. Myocardial fatigue in hypertension, chronic cardiovascular disease or adhesive pericarditis.

Aside from these, there is the pain due to coronary angina pectoris, sometimes called Heberden's angina. It is this that one should mean when one says angina pectoris, and this alone. There is no place for such terms as anginoid, or pseudo-angina. It is generally believed that this is due to arteriosclerotic changes in the coronary arterial circulation. Such changes produce a deficient coronary blood flow which eventually produces degenerative changes in the myocardium. The term arteriosclerotic heart disease should indicate the belief or assumption that the cardiac changes present are due to sclerotic changes of the coronary arteries. It has been suggested, therefore, that it would be much better to use the term coronary heart disease instead of arteriosclerotic heart disease for this reason. Some of such patients have angina pectoris, others coronary thrombosis, others degenerative changes of the conducting tissues and myocardium, or all together.

MECHANISM OF PRODUCTION OF PAIN

As to the mechanism of pain production, the present most plausible explanation is as follows: Due to the sclerosis of the coronary arteries there is a relative decrease of coronary blood flow due to the narrowing of the arterial lumen and loss of elasticity. This relatively decreased flow is however adequate for the myocardium under ordinary conditions of activity. If, as a result of physical effort or emotional stress, cardiac activity is increased there is a corresponding increased demand for coronary blood flow. As a result of the pathologic changes this increased flow cannot result and there results a temporary relative myocardial ischemia and anoxemia. It is thought that this anoxemia in some undetermined manner gives rise to the production of pain with its characteristic referred localization. As soon as the effort or increased heart rate ceases the circulation again becomes adequate, the ischemia and anoxemia are remedied and the pain ceases.

Now it can be seen from the above explanation that any situation which can cause a disproportion between the blood or oxygen required by the myocardium and the blood or oxygen supplied to the myocardium can produce angina. This explains the occurrence of pain not only in the organic disease of the coronary arteries, but also in the anemias where the oxygen carrying power of the blood is decreased, in paroxysmal tachycardia and hyperthyroidism, in aortic regurgitation where pressure in the coronary circulation is very low in diastole because of the rapid regurgitation, and in syphilitic changes about the mouths of the coronary vessels.

SYMPTOMS

I have attempted to tabulate briefly the important symptoms of angina pectoris:

1. Upper substernal or precordial pain.

2. Pain is sudden in onset.

3. Pain occurs usually upon exertion, after eating, or under emotional stress.

4. Pain is steady, severe, sharp, continuous, gripping, strangling, pressing, vicelike, suffocating.

5. Pain radiates to the left axilla, down ulnar side of left arm to elbow, wrist, ring and little fingers. Pain may also radiate instead or in addition to the right arm, or to one or both sides of neck, jaw, face, or to either shoulder, back or upper abdomen.

6. Pain usually lasts from 15 to 30 minutes.

7. There is profuse cold clammy perspiration.

8. The facies is anxious and gray.

9. The blood pressure is usually elevated, even if previously normal.

10. The patient remains fixed in one position, either sitting, standing or lying, realizing that motion increases the pain.

11. Pain disappears with rest.

12. Physical examination, x-ray and electrocardiogram may be entirely negative. Recently there has been some discussion as to the significance of a large Q wave in the third lead of the electrocardiogram. At the present it does seem as if the presence of a large Q_3 is presumptive but not absolute evidence of the presence of coronary sclerosis, especially when a Q_2 is also present.

13. In questionable cases the electrocardiogram may be of further help as suggested recently if taken immediately after a period of calculated exercise, such as the Master's two step test. Often changes will occur in the electrocardiogram after such a test which were not present before, and which disappear after rest. These may occur with or without the associated production of an attack.

Such is the clinical picture of angina pectoris. The progression of the lesion is slow, and as the condition grows worse the amount of effort or emotional stress required to produce an attack decreases. Eventually the attacks may occur even at rest. When the attacks do occur at rest the precipitating factor may be a dream, some emotion, flatulence or changes in blood pressure occurring during sleep. The gravity of the prognosis is increased under such conditions. Of course, death may occur during any attack, probably as the result of ventricular fibrillation.

PROGNOSIS

The prognosis of angina pectoris is necessarily uncertain. While the average length of life after the first symptom has been estimated at four and a half years, it varies from immediate death to 20 years. One group of figures shows that 50 per cent of the patients die suddenly of the original attack, 30 per cent die of coronary thrombosis, 10 per cent of congestive failure, and the rest of cerebral hemorrhage, bronchopneumonia, or cancer. Incidentally, sudden death is usually cardiac in origin, either as a result of ventricular fibrillation, ventricular rupture or complete heart block.

TREATMENT

First, it is well to say that one should avoid the use of the term angina pectoris to the patient, if possible. The term is well known and carries with it a fear and dread which does not help the patient's morale. The seriousness of the condition should be adequately explained to the patient's family. Sometimes it is necessary to tell the patient the absolute truth so that he can adjust his life and affairs accordingly. Just when to tell a patient and how much requires a nicety of judgment which is very difficult to decide. Some have suggested the term of "vascular-spasm" to be used to the patient. This often proves quite satisfactory.

The pain should be relieved by the use of perles of amyl nitrite by inhalation, 5 drops, or soluble hypodermic tablets of nitroglycerine 1/100 gr. allowed to dissolve under the tongue. Three drops of spirits of nitroglycerine may be used in the same way, instead of the tablet. If neither of these medications is available the ingestion of 1 ounce of whiskey or brandy often causes sufficient vasodilatation to relieve the attack. The whiskey may be used in addition to the other medication in the presence of low blood pressure and shock. The soluble nitroglycerine tablets are usually preferred; they are easily carried around, easier to use and do not produce as much flushing or headache as amyl nitrite. Nitroglycerine is not habit forming, does not lose its effect by frequent use, and therefore should be used as often as necessary for the

relief of pain at its earliest recognition or even prophylactically before any effort or stress which is likely to produce an attack. If the pain is not relieved in 10 minutes by one of the above three medications, a second dose should be given. If in 10 minutes more there is no decrease of pain, morphine sulphate gr. 1/4 should be given by needle, and repeated in 10 minutes if necessary. Pain lasting longer than 30 minutes is more likely not to be angina pectoris and if cardiac in origin may well be coronary thrombosis. There is some question as to whether or not atropine should be given with the morphine. I prefer to use the morphine alone in coronary artery disease because of the possible effect of the atropine on decreasing the coronary flow and, by removing vagal effect, increasing the heart rate, both undesirable. The suggested use of 50 or 100 c. c. of 50 per cent glucose intravenously for shock will be discussed under the management of coronary thrombosis where this emergency usually occurs.

In an attempt to decrease the frequency and severity of the attacks the xanthines are often used. Many physicians do not believe the xanthines help at all. I believe I have seen beneficial results and give aminophyllin tablets, 1½ grains each, dissolved in water, three times daily after meals. These may be continued for long periods of time unless they produce nausea or diarrhea by cumulative action. Others prefer tablets of erythrol tetranitrate gr. 1/12 three times daily for continuous nitrite effect. This often produces headache, but may be helpful where the aminophyllin does not seem of any benefit. Sedatives, such as phenobarbital, grains 1/4 to 1/2 three times daily alone or with one of the above, decreases the irritability of the patient, produces relaxation and aids sleep. Larger doses, 1 or 1 1/2 grains may be used in addition, at bedtime if necessary. Bromides, chloral or other sedatives of choice may of course be substituted.

The attempt must be made to avoid all precipitating factors of the attacks. Exertion must be limited, excitement or emotion eliminated as much as possible, and flatulence and gastrointestinal disturbances avoided by frequent small meals. A period of rest of from one to one and a half hours after the main meal, preferably in midday, should be advised. Nothing should be done that will produce an attack. The bowel movements should be kept soft with mineral oil, or mineral oil and agar or other mild laxatives to avoid the exertion of straining at stool.

Tobacco should be prohibited, if possible. Alcohol in moderation is not harmful and may even be beneficial; it should be allowed. Coffee and tea in moderation may also be permitted.

Other medications have not proved of any value. Potassium or sodium iodide have been used because of the time honored though empirical teaching of their value in arteriosclerosis. Their value is quite questionable and it has been suggested that when they do seem to help it may be because of a masked mild hyperthyroidism existing. Papaverine and tissue extracts or so-called heart hormones have not been of proved value.

If ventricular tachycardia occurs quinidine should be used. It may even be advisable to use it when frequent ventricular premature contractions occur. Its dosage will be discussed later.

Digitalis is not indicated unless cardiac failure, auricular fibrillation or paroxysmal nocturnal dyspnea is present. It should then be used as usual.

Certain surgical procedures have been suggested for the treatment of angina pectoris. I have had no experience with any of them. Cervical ganglia sectioning, thoracic (one to five) ganglia and posterior root ablations, alcohol injections of the first five thoracic ganglia, total thyroidectomy, and implantations of pectoral muscle or omentum on the heart have all been suggested and performed. When on several occasions I have found cases that I thought suitable for such procedures I have been unable to get the consent of the patient or the family even to have a surgical opinion on the problem.

CORONARY THROMBOSIS

Coronary occlusion is almost 100 per cent due to the thrombosis of a sclerotic artery.

Rarely the occlusion may be embolic from an endocarditis or carcinomatous metastasis.

SYMPTOMS AND SIGNS

The pain is usually like that of angina pectoris. It is more often substernal than precordial, or both, and is severe, agonizing, persistent. It may be located chiefly in the epigastrium or hypochondrium, and in a few rare cases there is no pain. Under such circumstances other symptoms, especially dyspnea and shock, are predominant. The pain is sudden in onset, often while the patient is at rest, lying down or after meals. The radiation is like that of angina pectoris. Usually the pain lasts longer than that of angina, one hour or more, or even for days or weeks, and is not relieved by the vasodilators mentioned previously. Morphine does usually relieve the pain.

The patient is usually anxious and restless, walking up and down or swaying back and forth, holding the chest over the sternum. The facies is anxious, there is a profuse cold perspiration and a rapid weak pulse.

Death may occur immediately as a result of ventricular fibrillation or shock, or the immediate attack may be survived and heart failure, heart rupture, or cerebral or pulmonary embolism may result in death later.

The presence of a pericardial friction rub is a most important physical sign. It is said to occur in 20 per cent of cases. In my experience, with careful repeated observations, I have not found nearly such a large percentage. It occurs in a few patients within a few hours, but usually can be recognized from the second to the fifth day. It is sharply localized ordinarily and of short duration.

Fever and leukocytosis occur in from 24 to 36 hours and last from two or three days to many weeks. The fever usually ranges from 100° to 102°F. and the leukocytosis from 10,000 to 14,000. Counts of 20,000 or more may occur. These two signs are very important and are due to the absorption of split protein from the necrotic process of the myocardial infarct.

In a few cases, about 10 per cent, a glycosuria and hyperglycemia occur in a few hours, to last 36 to 48 hours. The exact mechanism for the production of this sign is not understood. Oliguria is usually present.

The blood pressure usually falls. The fall may be delayed one or two days and occurs gradually, and early it may actually be elevated. While the immediate fall of blood pressure is thought to be the rule, one should not be misled by the finding of an elevated or usual blood presure. Later, after weeks, the blood pressure gradually rises again, and while it may reach its original value it usually remains at a lower level.

Dyspnea may be marked, and may be associated with the coughing of frothy bloody sputum as the result of pulmonary edema. In less severe cases, rales may be heard at both lung bases.

Nausea and vomiting may occur. These symptoms are often so pronounced as to lead to the mistake that the attack is gastrointestinal in origin. To add to this difficulty a mild degree of icterus may be present. There may be abdominal distention and hiccough. The liver edge may be palpable and tender.

The heart sounds are distant and cardiac irregularities such as premature contractions, auricular fibrillation or ventricular tachycardia are not uncommon. The pulmonic second sound is usually accentuated.

The electrocardiogram is of great service and will substantiate the diagnosis or establish the diagnosis in practically all cases if taken within the first five days. These typical changes may occur immediately, within a few hours, or be delayed in their typical form 36 to 48 hours. The changes consist of alterations of S-T interval and T waves essentially, though bundle branch block or auriculoventricular block may occur. The fourth lead, or precordial lead, is often of considerable assistance. The electrocardiogram usually shows one of two patterns: The Q_1 T_1 or anterior type electrocardiogram, indicating occlusion of the anterior descending branch of the left coronary, or the Q_3 T_3 or posterior type, indicating occlusion of the right coronary or the circum-

flex branch of the left. There has been considerable discussion as to whether the mortality is less and the prognosis better in the majority of patients with the Q_3 T_3 or posterior type cardiac infarcts than in those with the Q_1 T_1 or anterior type cardiac infarction.

The sedimentation rate is helpful. It is usually accelerated from two to five days after the thrombosis and may be so for several weeks. It too is due to the absorption of the split protein from the necrotic heart muscle. It is useful in conjunction with other observations in determining how long a patient must be kept at rest, because its marked decrease or return to normal is said to indicate that the healing of the infarct is complete and solid.

INCIDENCE

The immediate mortality rate of coronary thrombosis is about 17 per cent. The condition occurs three to four times more frequently in males than in female. In women it is usually associated with diabetes or hypertension, and the absence of either of these two conditions in a female with suggestive symptoms should make the diagnosis of coronary disease very unlikely. Heart failure occurs in about two-thirds of the cases, and while more often left sided, may be both left and right sided. Shock occurs in about 50 per cent of the cases and the mortality is said to be six times greater with shock than without. The average life expectancy after the first attack of coronary thrombosis is said to be about two and a half years.

TREATMENT

The initial attempt in treating the acute attack is the relief of pain. Most physicians believe that this is best done with morphine in 1/4 to 1/2 grain hypodermatically, without atropine for the reasons previously mentioned. Some prefer to try codeine, grains 1/2 to 1 by needle because of the vomiting, respiratory depression, spasms of sphincters and urinary retention produced by morphine. They use morphine in smallest doses only if the pain is severe and prolonged. I prefer to risk the disadvantages of morphine to secure prompt certain relief. About 1/6 grain morphine will usually do as much good as 1 grain of codeine. Even 1/4 grain of morphine may have to be repeated every 10 minutes until relief, though this is preferable to giving 1/2 grain morphine immediately. Pantopon has no advantage, being only dilute morphine. Dilaudid may be used, 1/20 grain being equal to 1/4 grain morphine. It is also habit forming however; I personally have seen two cases of addiction to dilaudid. I believe there is no adequate substitute for morphine in this circumstance.

If shock is present it must be combated with external heat, and possibly the administration of coramine. Adrenalin, ephedrine or infusions should not be used unless absolutely necessary. I have used the intravenous administration of 50 c. c. of 50 per cent glucose once or twice daily with excellent results in shock, pain and oliguria. Recently there has been some expression of opinion and some experimental evidence tending to show that hypertonic glucose may be harmful rather than beneficial in coronary sclerosis, increasing the load on the circulation by increasing plasma and increasing oxygen demand of the myocardium.

The patient should be kept at absolute rest, for at least six to eight weeks, or more. During this time it is well to encourage active and passive motion of the legs to avoid the frequent occurrence of venous thrombosis. Sedatives will help in the enforcement of this rest regimen.

Oxygen is often helpful, especially with cyanosis, shock, pulmonary edema or extreme pain of long duration. The newer aviation-type oxygen masks are efficient, practical and more comfortable for the patient.

Digitalization is indicated only if there is cardiac failure or auricular fibrillation of high grade. Then there should be no hesitancy in proceeding with the digitalis therapy.

Some have advocated the routine administration of quinidine to prevent the occurrence of ventricular fibrillation. I believe it better to use quinidine only if there are fre-

quent ventricular premature contractions or ventricular tachycardia, because it is a cardiac muscle depressant and not without danger. Others might also begin its use with auricular fibrillation, though I would prefer digitalis in full dosage first and then quinidine if necessary in addition to the maintenance digitalis dose. The dosage of the quinidine is 3 grains to be repeated at four to six hour intervals if necessary, if no toxic symptoms of nausea, urticaria or visual disturbances occur. It may be necessary to give the quinidine at closer intervals, and often a maintenance dose is necessary.

Hot packs to the kidney regions may help the anuria. Stupes and enemas two or three times daily may be used if necessary for abdominal distention. For the first 48 hours, especially if there is shock, it is better to let the intestinal tract alone and get maximum rest and least disturbance.

Mercurial diuretics like mercupurin or salyrgan have been recommended for excessive breathlessness. The theobromine derivates or aminophyllin may be given in 1 1/2 grain doses three or four times daily, dissolved in water, though it is best to wait until any nausea has subsided as it may aggravate or produce this symptom. Glycine, 10 grams (1 level tablespoonful) three times daily is said to help muscle metabolism and may be tried.

The diet should be liquid and soft for the first few days, and given in frequent small feedings. In overweight patients a low caloric diet is indicated for reduction, 800 or 1000 calories if possible. Even without overweight a low calorie diet reduces the work on the heart and is beneficial. Often a Karrell diet for a few days, especially with heart failure, is helpful, because it is low calorie, low protein, salt poor, and provides a limitation of fluid. This is merely 200 c. c., or one glass, of skimmed milk four times daily with as little additional water as possible. The use of heparin in coronary thrombosis as an anticoagulant is still questionable, though it may eventually be of clinical value.

Later, there is often an anorexia which is troublesome. Then vitamin B, dry wine or other alcoholics in moderation help to improve the appetite. Tobacco should preferably be entirely eliminated or firmly moderated. Tea and coffee may be allowed in moderation.

If the patient is diabetic he should be managed very carefully and no attempt made to reduce the glycosuria too suddenly with insulin. If syphilitic, treatment for this condition should not be given until after the emergency, and then only iodide or bismuth used.

After the six to eight weeks' period, and an adequate recovery, if cardiac compensation is sufficient and there are no other contraindications, activity may be gradually resumed and carefully increased. The patient must be observed for any untoward signs or symptoms during this period. He should be told that the occurrence of pain, breathlessness, fatigue or ankle edema means that he is doing too much, and he should stop, rest, and avoid the repetition of such activity. He may be allowed to do anything within reason that produces none of these symptoms. Many of these patients can in this manner and with care resume a remarkable degree of normal, happy, useful activity.

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PLASMA PROTEINS*

METHODS OF DETERMINATION AND CLINICAL SIGNIFICANCE

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The plasma proteins are fibrinogen, albumin and globulin. The total plasma protein ranges from 6 to 8 gm./100 c. c., average, 7.4 gm./100 c. c., of which the albumin ranges from 3.6 to 5.4 gm./100 c. c., average, 4.3 gm./100 c. c., and the globulin ranges from 1.5 to 3.4 gm./100 c. c., average, 2.8 gm./100 c. c. The albumin: globulin ratio is about 1.53. The fibrinogen is about 0.3 gm./100 c. c.

Fibrinogen: The function of this protein in the clotting of the blood is well known. Diets rich in protein produce an increase in the fibrinogen. This protein also participates in the repair of injuries of the vascular system. Tissue injury, infection or inflammation, acute hepatitis, menstruation and pregnancy cause an increase in fibrinogen, while in diseases of the liver, such as acute yellow atrophy or in phosphorus poisoning, there is a decrease in the fibrinogen.

Albumin and Globulin: The most important function of these plasma proteins is the regulation of the normal osmotic pressure between the blood and tissues. The normal osmotic pressure of the plasma is 6.5 atmospheres (494 cm. Hg). Wies and Peters[1] have given the following equation for calculating the colloid osmotic pressure:

$$\Pi = 60.9 \times A^w + 22.0 \times G^w - 50,$$

where Π = the osmotic pressure in mm. of water; A^w, the grams of albumin, and G^w, the grams of globulin, per 1000 grams of water.

HYPER- AND HYPOPROTEINEMIA

Deficits in plasma proteins are encountered more often clinically than hyperproteinemia. The plasma proteins are below normal in the following conditions: Nonhemorrhagic degenerative Bright's disease or nephrosis which is due to a deficit in albumin and the tendency toward edema runs parallel with the albumin concentration of the plasma; terminal glomerular nephritis; malnutrition; cirrhosis of the liver; non-inflammatory edema fluids or transudates; pregnancy, and in infants under two years of age. Normal plasma proteins are found in the following conditions: Acute glomerular nephritis, arteriosclerotic Bright's disease, purulent exudates from empyema, exudates from tuberculosis, pleurisy, tuberculous peritonitis, pneumonic pleurisy, hemorrhagic anemia and meningitis. The protein content of subcutaneous edema fluids, and of pleural and peritoneal transudates occurring as a result of myocardial failure, nephrosis, and cirrhosis of the liver, ranges from 0.1 to 1 per cent. A high concentration of plasma proteins occurs in the following conditions: Kala-azar[2] due to a rise in the globulin content while the albumin is reduced, multiple myeloma,[3] lymphogranuloma inguinale[4] and in severe dehydration[5] due to restricted water intake, diarrhea, or vomiting; subcutaneous edema fluid of acute nephritis; blister fluids, and in the edema fluid of angioneurotic edema.

Leiter[6] observed that edema begins in dogs when the plasma protein content falls below 3 per cent, and disappears as the protein content is raised. Whipple and coworkers[7] studied plasma protein regeneration and found that a meat diet was best for this purpose. It was observed that fibrinogen and globulin were regenerated faster than albumin. Depletion of the plasma proteins below 1 per cent results in fatal shock. Edema in man usually results when the plasma protein falls below 5 per cent. Chronic malnutrition resulting in edema is due to a low protein intake and is almost always associated with a low plasma albumin.[8, 9, 10] In nephrosis the edema is accompanied by a large excretion of protein in the urine.

Many observers have shown that there is a parallelism between the specific gravity

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*Presented before the scientific meeting of the Orleans Parish Medical Society, February 12, 1940.

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and the protein content of the plasma or serum, and this relationship can be expressed by the following equation:

Per cent serum protein = 343 x (S. G. — 1.007).

METHODS OF DETERMINING THE PLASMA PROTEINS

According to Myers and Muntwyler,[5] the method of Howe[11] gives reproducible results. The well-known Kjeldahl method has been used for many years for the determination of the plasma proteins. Moore and Van Slyke[12] showed that the specific gravity of the serum is mainly governed by the protein content and published a method of protein determination by weighing serum in special glass bottles on an analytical balance. While accurate, this method requires more time and equipment than the methods to be described below.

It is my intention here to mention the two recent methods for the determination of the specific gravity of the plasma which are probably destined to become standard procedures for this determination in the future. They leave little to be desired from the standpoint of accuracy, simplicity and rapidity. The first of these is the glass bead method of Jens Bing,[13, 14] of Copenhagen, for the determination of hypoproteinemia. Bing has been able to determine cases of hypoproteinemia by means of a float in the form of a small glass bead made from a glass tube with a diameter of 2 mm. and a thickness of 0.8 mm. The tube is sealed by melting at one end, blown into a small sphere, which is then cut off, whereupon the other end is sealed by melting. The glass bead is then ground until at 20° C. it is suspended in a salt solution of a specific gravity of 1.0245, but floats at the top or sinks to the bottom with a higher or lower gravity, respectively. The bead floats at the top of the liquid at a specific gravity of 1.025, is suspended at specific gravity 1.0245 and sinks to the bottom of the tube at specific gravity 1.024. It will also move downwards at a temperature of 21° C. and upwards at 19° C. Hence the temperature of the determination should be at 20° C. On testing the bead on 100 sera of which the protein content had been determined by the Kjeldahl method, the result was found to be correct in every case at value of over 6.2 and under 5.84 per cent protein. The error of the method is ± 0.5 per cent.

DIRECTIONS FOR THE TESTS

After the briefest possible stasis 4 or 5 c. c. of blood are taken by venal puncture in a dry centrifuge tube, which is then stoppered to prevent evaporation. The sample stands for some time for coagulation, whereupon the coagulate is thoroughly centrifuged and the 2 or 3 c. c. of serum are poured into a reagent tube in which has been placed a thermometer. The glass bead is then dropped into the serum and the reaction is read off: Negative (i. e., there is more than about 6 per cent protein) if the bead floats at 20° C. or lower, and positive (i. e., there is less than 6 per cent protein) if the bead sinks to the bottom of the tube at 20° C. or lower. Only in cases where the bead ascends at temperatures below 20° C. or descends at temperatures above 20° C. is it necessary to adjust the temperature to exactly 20° C., which can be done by warming the tube with the hand or cooling it under running water. At 20° C. the test requires 15 to 30 seconds, whereas it requires two or three minutes if the temperature has to be adjusted.

The method of choice, however, and the one which has been adopted in 68 hospitals and medical schools in this country, is the falling drop method of Barbour and Hamilton,[15] of Yale, of determining the specific gravity. The principle of this method involves timing the fall of a drop of body fluid of known size through a definite distance in a mixture non-miscible with the fluid. This mixture consists of xylene and brombenzene. A heavier drop will fall faster than a drop nearer the density of the mixture. The density of the XBB mixture is not required. Only the falling time of a solution of potassium sulfate of known density is determined. This serves as an index to the significant relations between drop and XBB mixture obtaining at the

moment. The accuracy of the method is one-tenth of 1 per cent.

The falling drop tubes are engraved B_1, B_2, P_1, P_2 respectively. B_1 is used for normal and concentrated blood, B_2 for anemic blood. Tubes P_1 and P_2 are used for plasma and serum. By means of the Guthrie pipet controller, a drop containing 1/100 c. c. of body fluid is released into the appropriate falling drop tube, filled with a liquid immiscible with the body fluid. The drop is timed as it passes between two marks 30 cm. apart, engraved upon each tube. A stop watch calibrated in 1/10 seconds is employed and the time noted. The falling drop pipet allows the release of two drops. The falling time of the first drop is not recorded as its release is a trial operation. The falling time of the second, third and successive drops, however, is noted and an average is recorded. The temperature of the water bath is noted. The apparent density difference of the body fluid is then found by means of the alignment chart furnished with each set.* The apparent density difference of the standard solution of known specific gravity is next determined by going through a similar procedure as described above. With the above data and applying simple arithmetic the specific gravity of the fluid is found, from which the protein content may also be calculated.

Normal blood densities range from 1.053 for the female to 1.056 for the male. Polowe[16] has discussed the clinical significance of the blood specific gravity determination. This determination achieved immense popularity after its use in the cases of many of the victims of the recent von Hindenberg Zepplin disaster, Lakehurst, N. J. Hopeless cases were rushed to the Columbia Presbyterian Medical Center where their conditions and control of their treatment was guided by the specific gravity method and their lives saved. Mortality due to cholera at the Calcutta Medical College was reduced from 50 to 21 per cent by maintaining the hemoconcentration slightly below normal. The hemoconcentration of the blood proteins was found by the specific gravity method and adjusted by the administration of fluids.[17] The same was true in many cases of intestinal obstruction.[18] Shock was found to increase the specific gravity of the blood[19, 20, 21, 22] and this occurred before the drop in blood pressure. The determination of the specific gravity of the blood has proved of great value in detecting and controlling postoperative hemorrhage.[23] Scudder's book on "Shock, Blood Studies as a Guide to Therapy," will be off the press in the near future.

*Eimer and Amend, 205 Third Ave., New York City, Bulletin 590 describes in detail the falling drop apparatus.

CONCLUSIONS

Some of the advantages of the falling drop method for determining blood specific gravity are:

1. The determination requires one minute, using one drop of blood and can be made in the operating room.

2. From these determinations the percentage of plasma proteins can be estimated and the detection and control of conditions of dehydration, shock or postoperative hemorrhage achieved.

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THE EFFECTS OF WAR ON MENTAL HEALTH*

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The past twelve months have been anything but quiet and serene; tremendous forces of unrest have been present in Europe and to a somewhat less degree in this country. There were a number of crises which, on September 1, culminated in the commencement of a second World War. Even a prophet of old would undoubtedly find it difficult to say what the end will be; it requires less than a seer to admit that the conception of a "war to end wars" was only idealistic wishing. I have given up such idealism and believe it a fact that a millennium will not come to pass for many centuries; man will have to change completely. Evolution is a slow mechanism.

The last chapters of the history of the First World War are not free of serious and depressing connotations. Brig. Gen. Frank T. Hines (in Military Surgeon, May, 1939) reminds us that the Veterans Administration has grown to be one of the largest government agencies, having over 38,000 employees. The Veterans Administration as now operating cares for all activities affecting beneficiaries of all wars: there are nearly 600,000 living veterans and 316,000 dependents of deceased veterans who receive monthly pensions. There are 341,000 World War veterans who receive monthly compensation on account of disabilities considered of World War service origin or aggravation; 79,000 dependent parents, 2,700 widows, and 37,000 orphans receive monthly compensation.

As the government is paying a pension to one child of a veteran of the War of 1812, it is probable that for the next fifty or seventy-five years pensions will be paid to descendants of veterans of the World War. From the annual report of the Administrator of Veterans Affairs for 1938, it was learned that the total disbursements of funds of the Veterans Administration made a grand total of $629,829,721.73.

During the active period of training and the state of combat the total number of neuropsychiatric cases amounted to nearly 50 per cent of all casualties (Col. W. F. Lorenz, Sixth International Congress). Since the Armistice the actual number of such disabilities has continued to increase, and the peak load is not expected until 1947.

I must not impose upon your patience longer by quoting statistics. We realize better than anyone else the need of proper plans by the Surgeon General's office and his expert advisors for the study of all recruits at the time they apply for enlistment or during a probation period of three months. This Association, with the American Psychiatric Association, should urge as strongly as possible the institution of measures to reduce to a minimum the casualties in our armed forces resulting from neuropsychiatric disorders.

To describe the tension, suspense, uncertainty, apprehension, anxiety and fears that have resulted from the seizure and dismemberment of the smaller countries of Europe and the eminence of conflicts between the greater nations, the phrase "war of nerves" has been coined. While this phrase may not rival "shell shock" of the last war, it is more accurate in its impli-

*Presidential address before the Southern Psychiatric Association, Louisville, Kentucky, October 9-10, 1939.

cation and affects the peoples of all civilized nations.

Great wars have taken place in the past, but there has never been a situation which might be compared to the present in the effect on the psyche. Agents of destruction, as tanks, huge cannon, submarines, and airplanes with their bombs, have been improved during the past twenty years, making a modern war more terrible than ever before. However, there is another aspect to the present war that is experienced far away from any physical disturbance wrought by airplanes or bombs. All the wonderful achievements of this mechanical age are not pure blessings, for space and time have been eliminated. Forty or fifty years ago this country was remote from Europe, and what took place in the Eastern Hemisphere could have but little effect on those living on this continent; even in 1917 and 1918 we were still somewhat remote. The effect of radio in this troubled time is difficult to measure, but it is my opinion that medical historians will find the radio has, in effect, produced a world wide war and that we are actually in that war, the "war of nerves." Like every other American, I pray we shall never have to send an army to fight on foreign battlefields; however, due to the elimination of distance we are affected emotionally by what takes place in countries many thousand miles away.

It may be, as averred, that this war will be won by propaganda. The last war did not terminate until men at the front learned that those at home were suffering and discouraged. A whole nation has been forbidden to listen to radio talks from beyond its own borders in order that the people might hear only that which has been prepared for their consumption. The dropping of leaflets from airplanes at the proper time may prove very valuable. That, however, is another story.

I wish to direct your attention to the effect of the present war in Europe on men and women of our country; there are very few people in the United States who are not concerned to a greater or lesser extent by the happenings in Europe. Today the news broadcasts are listened to more avidly than ever before; the announcers dramatize the news by making it sensational and enhancing all the lurid details; the trans-Atlantic broadcasts take one very close to the area of strife. All these factors play important roles in stirring the emotions and disturbing the sympathetic nervous system and many bodily functions. It seems to me that the blood pressure of the nation must have risen to above normal since there has been so much to disturb the emotional equilibrium. There is a fear among many, particularly among those old enough to remember 1914-1918, that this country will be drawn into the war. However, as has always been the case, the younger generation experiences little concern.

A number of people have told me they can hardly think of anything except this dreadful war; others, I have observed, have developed depressive disorders and mild anxiety states as a result of the affairs in Europe. It is said that mental disorders increased greatly in Spain due to the privations and horrors of their civil war, and one writer stated that insanity had increased by 300 per cent, although a confirmation of this has not come to my attention.

At this meeting of the Southern Psychiatric Association, and in others to follow, I hope you will investigate further the effects of a world war on mental health and devise measures which may help minimize the harmful effects of this "war of nerves."

ACUTE EPIDURAL ABSCESS OF THE SPINAL CANAL*

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In May, 1939, J. O. Weilbaecher, Jr., read a paper before this Society on acute epidural abscess of the spinal canal. For this reason, probably, the chairman of the program committee asked if I could show

*Presented before the Orleans Parish Medical Society, February 12, 1940.

such a patient. We have two young men here on the stage tonight who are recovering from this disease.

CASE REPORT NO. 1

This man had a mastoidectomy at the Eye, Ear, Nose and Throat Hospital last June. There was nothing unusual about the infection or the operation. He went home after the usual period of time. About two weeks later he began to have severe pain in both sides of the chest which, in retrospect, was caused by irritation of nerve roots by an extradural abscess of the spinal canal. A few days later he came to Charity Hospital. There he rapidly became paralyzed below the midsternal level. On the evening of the day I saw him, he was unable to wiggle the toes of either foot and was anesthetic below the nipple line. The bladder was paralyzed. There was fever and leukocytosis. A spinal puncture demonstrated a complete subarachnoid block. One cubic centimeter of lipiodol was injected to determine the exact site of the lesion. On the same day a laminectomy was performed under local anesthesia. A mass of granulation tissue and pus was evacuated from the canal thus relieving the compression of the spinal cord. About twenty-four days later he was able to move the toes. Now, at the end of three months, he is walking and has returned to work in a newspaper office. The bladder function is practically normal and the anesthesia has disappeared.

CASE REPORT NO. 2

To be as brief as possible, this young man presents an almost identical picture. He was at Charity Hospital on the surgical service where he was being treated for boils on the buttocks. He was about to go home when he complained of pain in both sides of the chest. After a few days of pain and rising fever he started to become anesthetic and paralyzed below the nipple level. He developed urinary retention and had to be catheterized. The surgical resident found a complete spinal block, and one cubic centimeter of lipiodol was used to demonstrate the exact site of the lesion. A few hours later he had become almost completely anesthetic and paralyzed below the waist. At operation on the same day a mass of granulation tissue and pus was removed from the spinal canal. Because he was paralyzed a shorter time than the preceding patient, he has already started to walk. At this time, five weeks following operation, he has recovered control of the urinary bladder and the anesthesia has largely disappeared.

CONCLUDING REMARKS

These two patients present the classical picture of metastatic abscess of the extradural tissues of the spinal canal. This disease entity is usually erroneously diagnosed as poliomyelitis or infectious myelitis. Such mistakes could be easily avoided by use of the Queckenstedt test. If a spinal block is found in a patient who is rapidly becoming paraplegic, a laminectomy should be performed at the earliest possible moment. If operation is postponed until 24 hours after paralysis has become complete, there is practically no chance for recovery of function.

ACUTE SPONTANEOUS CEREBRAL VASCULAR ACCIDENTS IN ADULTS

A REVIEW

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It is important to differentiate the various spontaneous* cerebral vascular accidents. The average physician rarely attempts to do so, and the majority of cases of cerebral vascular lesions are indiscriminately labeled "cerebral hemorrhage", or "cerebral accident." This is true despite the differences in symptoms, signs, and, with particular emphasis, the prognosis of these conditions. The academic exercise of localizing the lesion, which is so intriguing to the neurologist and internist, must be supplemented by an ability to differentiate the types of lesions.[1]

Due to their extreme rarity, all instances of bleeding from the meningeal vessels, with the exception of the important syndrome of spontaneous subarachnoid hemorrhage, have been eliminated from the discussion.

SPONTANEOUS SUBARACHNOID HEMORRHAGE

One of the oldest and most interesting reports on the subject was given by Bramwell[2] in 1886. The clinical diagnosis was facilitated by the introduction of lumbar puncture by Quincke[3] in 1891. Apparently this condition was seldom recognized clinic-

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*By the word "spontaneous" it must be understood that syndromes usually due to trauma are eliminated and of necessity syndromes that may be precipitated by trauma are included.

ally before 1904, and it has been but recently that the syndrome has been described with any degree of frequency.

Undoubtedly, spontaneous subarachnoid hemorrhage occurs much more frequently than is commonly appreciated.[4] Ohler and Hurwitz[5] found that in an 18 month period at the Boston City Hospital there were 353 cases of cerebrovascular accidents of all types, and among that group were 24 cases of spontaneous subarachnoid hemorrhage. By comparison, they showed that during the same period the much more generally recognized subacute bacterial endocarditis was represented by 22 cases. Spontaneous subarachnoid hemorrhage may occur at any age, but apparently it occurs most frequently between the ages of 25 and 40 years.[6, 7]

Spontaneous subarachnoid hemorrhage follows the rupture of a meningeal aneurysm[1] or a congenitaliy defective meningeal vessel lying in the subarachnoid space. Observers are uniformly of the opinion that the syndrome occurs most commonly on the basis of the rupture of a known or unsuspected aneurysm, generally at the base of the brain. All are agreed that syphilis is rarely the cause of the aneurysm formation. Ohler and Hurwitz[5] were unable to demonstrate syphilis in a series of 24 cases. Aneurysm formation may be due to congenital defect in structure, arteriosclerosis, or mycotic in type,[1] and even though present may be very difficult to find on postmortem examination (Schmidt[8]). According to Strauss and his co-workers,[7] and Wechsler,[9] the most common pathologic finding is arterial degeneration of the arteriosclerotic type, and the former group state that this is true irrespective of age. Other possible causes of spontaneous subarachnoid bleeding are scurvy, hemophilia, leukemia, uremia, and acute infections.[10]

SYMPTOMS

As a rule symptoms arising from spontaneous subarachnoid bleeding have an acute onset.[1, 4, 9] However, headaches attributable to the presence of an aneurysm may have been present prior to the acute onset. According to Hurwitz,[5] there is no condition in medicine that is more dramatic, more sudden, than subarachnoid hemorrhage. Merritt[1] feels that the diagnosis can usually be made from the history and only rarely is the classical syndrome absent.

The most common presenting symptom is severe headache, which steadily increases in intensity. Dizziness is also a frequent symptom. Depending on the extent of bleeding, a cloudy mental condition, stupor, or coma may follow in a few hours or days. Focal signs are usually absent.[1] However, ptosis and ocular palsies may occur with basal bleeding.[9] McIver and Wilson[11] have noted that if hemiplegia develops, the face and arm, as a rule, more often show involvement than the leg because the hemorrhage is more often basilar in origin. Stiffness of the neck and Kernig's sign are rarely absent. There may be some degree of fever, a slow pulse, and albuminuria. Leukocytosis, as described by Musser,[12] has been frequently noted. The pupils may be of any size, and Wechsler[9] has often noted inequality and sluggishness in reaction. Wilson[4] found that many patients show mild glycosuria or hyperglycemia. Hypertension may or may not be present. Apparently, ophthalmoscopic examination will only occasionally reveal papilledema.[1] Coma and convulsions at the onset are quite rare. The cardinal finding of diagnostic import is the presence of gross blood well mixed with spinal fluid,[1, 4, 9] which is never absent unless the puncture is done less than three to four hours after the onset.[1] The intracranial pressure is moderately to markedly increased. All agree with Sharpe[13] that diagnostic lumbar puncture should never be performed before the patient has recovered from the initial shock.

Rapid onset of headache, drowsiness, neck rigidity, moderate fever, possibly albuminuria and leukocytosis should arouse suspicion of subarachnoid hemorrhage. Wilson[4] feels that the diagnosis of spontaneous subarachnoid hemorrhage is not considered often enough as a possibility in the stuporous patient. Acute purulent meningitis,[14] subdural hematoma, and intracerebral hem-

orrhage have been the most frequently mistaken diagnoses observed.[1] Other conditions that have caused confusion are encephalitis, uremia, and diabetic coma.[4] It is not possible in many cases to differentiate the condition from intracerebral hemorrhage, but the occurrence of focal signs and convulsions or coma at the onset favor the diagnosis of intracerebral hemorrhage.

PROGNOSIS

The prognosis should be guarded, for while it is not hopeless, it is grave.[7] Wechsler[9] found that these patients may die within a comparatively short time, but generally the symptoms recede over a period of days, and the patient recovers. In Ohler and Hurwitz's series,[5] the mortality rate after an initial attack was 50 per cent, while the rate in Neal's series[15] was 40 per cent. The prognosis depends on the underlying cause, the size of the ruptured vessel, and the extent of the bleeding. Globus[7] states that recurrence of bleeding is not uncommon. Focal signs,[9] if they occur, may or may not clear up completely. Hurwitz[5] found that there is no correlation between the white count and the mortality rate, and also that coma apparently adds to the gravity of the prognosis. McIver[11] feels that if the cases are recognized and proper treatment instituted, a great majority will recover. The clinical course may be either short, with the patient recovering in the course of several days, or it may be stormy and protracted, lasting over a period of weeks.[4, 7]

LUMBAR PUNCTURE

The therapeutic use of lumbar puncture in the treatment of spontaneous subarachnoid hemorrhage is the subject of much controversy. Wechsler[9] seems to stand alone in the published opinions when he states that repeated lumbar punctures are not necessary and may be harmful. Sharpe[13] seems to be the strongest advocate for lumbar puncture in that he advises frequent routine lumbar puncture and spinal drainage. Merritt[1] and Ohler and Hurwitz[5] advise repeated routine lumbar puncture, but at less frequent intervals than does Sharpe. Several advocate therapeutic lumbar puncture, but do not give a plan of treatment.[4, 16] Some[7, 17] advise repeated puncture when indicated by headache, mental state, advancing papilledema and a slow pulse rate. To the reviewer the last stated plan seems to be one deserving very serious consideration. Wechsler[9] advances no tangible reasons for opposing therapeutic lumbar puncture. In the neglected patient the increased intracranial pressure will frequently lead to death.[4] Merritt[1] states that there is no adequate physiologic basis for the hypothesis that removal of cerebrospinal fluid tends to increase hemorrhage, and empirically found this to be untrue. His idea is that the rapidity of return of symptoms is due to unusually rapid formation of cerebrospinal fluid resulting from meningeal irritation and an impaired absorption of fluid resulting from plugging of arachnoid villi. According to Sharpe,[13] repeated lumbar puncture and spinal drainage not only permit a more rapid recovery of physical, mental, and emotional functions of the patient, but the degree of improvement may be so increased that the ultimate recovery may approximate normality. In using therapeutic puncture, the pressure should be lowered to one-half of the rise from normal level. In every one of 19 cases Sharpe[13] noted that the blood percentage lessened in successive therapeutic punctures for spinal drainage. Strauss[7] states that the spinal fluid should be clear and colorless and the pressure normal before the patient may be regarded as recovered. It has been found[1] by the use of repeated therapeutic lumbar puncture, that the pressure is usually normal by the tenth to the twelfth day, and that the fluid is entirely normal by the fifteenth to the twentieth day.

CEREBRAL EMBOLISM

From necropsy reports, cerebral embolism represents from five to ten per cent[1, 18] of fatal cerebral vascular accidents. Embolism may occur at any age, but is found more often in the young.[19] Emboli are generally derived from vegetations on the heart valves[20] and from atrial thrombosis in the case of auricular fibrillation. It may

take origin from a thrombus dislodged in a larger cerebral vessel.[9] Howell[6] has noted the condition in the puerperal state.

Prodromal symptoms, such as headache and vomiting, are quite frequent. The onset, as a rule, is quite sudden.[1] Unconsciousness is not a necessary occurrence, and when present is more than likely due to basilar and carotid occlusions rather than blockage of other arteries. Evans[18] finds that it is not unusual for consciousness to be maintained in complete hemiplegia. According to Wechsler[9] when coma does occur, it is not generally deep or of long duration except when a large vessel is occluded. Focal signs are practically always present. Bizarre clinical pictures often result due to multiple emoli.[1] Secondary hemorrhage due to septic emboli may result.[21] Fever is apt to be high in the course of septic embolism.

The differential diagnosis is quite similar to that of cerebral thrombosis. The key to the situation is usually discovered on the examination of the heart. Bizarre clinical pictures may suggest a diagnosis of encephalitis, brain tumor, or brain abscess. The important points in the differential diagnosis are: (1) A septic type of temperature; (2) an abnormal heart; (3) a normal or only slightly elevated intracranial pressure; (4) negative serum and cerebrospinal fluid Wassermann reactions, and (5) a positive blood culture.

The prognosis is generally considered to be poor, due to the underlying cause.

It is agreed that the treatment, both immediate and from the standpoint of the neurologic defects in patients that recover from the initial insult, is the same as that in cerebral thrombosis or hemorrhage.

CEREBRAL THROMBOSIS

Contrary to previous opinion, it has become an established fact within recent years that thrombosis and not hemorrhage is the most common type of cerebral vascular lesion. An analysis of necropsy material shows a higher percentage of hemorrhages than thromboses, while an analysis of clinical material shows, as would be expected, a much higher incidence of cerebral thrombosis than of cerebral hemorrhage[1]; yet in Courville's series[21] of 15,000 autopsies, in which there were approximately 1,100 cerebral vascular accident cases, 569 were cerebral thrombosis and 388 were cases of cerebral hemorrhage. Merritt's series[1] of 600 clinical cases showed an incidence of 66 per cent for thrombosis and 21 per cent for hemorrhage.

Thrombosis is found most commonly in persons past middle life and in advanced age.[9] The short branches of the middle cerebral, the long branches of the middle cerebral, the anterior cerebral, the posterior cerebral, and the basilar arteries are involved in the order of frequency named. The thrombotic area may be the size of a pinhead or involve a whole hemisphere. The largest areas usually occur in thrombosis of the middle cerebral artery.[9]

Cerebral thrombosis is due primarily to pathologic alteration in the cerebral vessel walls with, in addition, a change in the rate of blood flow and the character of the blood.[9] Thrombosis is most common in cerebral arteriosclerosis or in conditions in which the intima of the artery undergoes atheromatous changes. Wechsler,[9] among others, has found that the next in frequency is syphilitic endarteritis, in which the lumen of the blood vessel is gradually narrowed until it is finally closed. Since cerebral thrombosis is quite frequent in patients with syphilis, both with and without an accompanying arteriosclerosis and hypertension, Merritt[1] believes that routinely the blood and spinal fluid of all young or middle aged patients with a cerebral thrombosis should be examined serologically for syphilis, regardless of whether or not arterial hypertension is present. Cerebral thrombosis can occur in polycythemia, leukemia, malaria, carbon monoxide poisoning, narcosis, and has been reported as occurring in thrombo-angiitis obliterans.[9]

CLINICAL COURSE

The clinical course of thrombosis differs considerably in the beginning from either hemorrhage or embolism. The symptoms may be transient or permanent, local or

general. Evans and Harding[18] have noted that thrombosis is characterized by a gradual onset with premonitory symptoms of tingling in the extremities, vertigo, and embarrassment of speech occurring some time prior to the paralysis, which may begin in a localized area and extend slowly to a partial or complete hemiplegia. If the lesion occurs during sleep, thrombosis should be strongly suspected.[22] In addition, Wechsler[9] finds that an attack is not generally accompanied by loss of consciousness in the beginning, and frequently the patient never loses consciousness. As thrombotic lesions frequently involve the small cerebral vessels, relatively minor symptoms and signs, such as dizziness, nausea, vomiting, headache, personality disorders, and memory defects, are more likely to occur than paralysis or disturbed consciousness. The spinal fluid in cerebral thrombosis, as in hemorrhage and embolism, is generally colorless and may show increase of pressure to 300 mm. of water or more, and contain increased globulin. Syphilitic endarteritis is not infrequently accompanied by a negative spinal fluid.[9]

It is hardly necessary here or in the discussion on cerebral hemorrhage to give a detailed description of the various focal manifestations that may occur with involvement of individual vessels or their branches. Not only are localizing signs well agreed upon, as is seen in standard textbooks on neurology, but also in cerebrovascular accidents of a spontaneous nature, these signs are of academic interest only. However, it is interesting to note that occlusion of the artery most commonly involved, the middle cerebral, gives rise to hemiplegia, anesthesia with astereognosis, and may cause aphasia. The entire posterior cerebral vessel may be occluded, with a visual field defect[18] being the only finding. Occlusion of the basilar and vertebral arteries results in the typical bulbar syndromes.[9]

It is worth noting that the general symptoms may, and frequently do, vary with the type of lesion and the focal signs are independent of it and merely point to its location. During the acute stage there may be an interference with localization.

Alvarez[23] calls attention to the fact that he has on several occasions found gastrointestinal symptoms associated with, and on the basis of, a small cerebral thrombus which might have gone undiagnosed. He attributes the relationship to reflex disturbances in the gastrointestinal tract.

DIAGNOSIS, PROGNOSIS AND TREATMENT

Thrombosis, according to Howell,[6] is the accident most likely to occur when arterial disease is associated with low blood pressure. The differentiation between hemorrhage, thrombosis, and embolism frequently may be difficult. If the points given in the differential diagnosis of embolism (*v. s.*) are remembered, together with the fact that embolism in contrast to thrombosis is usually sudden in onset, one will have several excellent points to aid in their differentiation. Jelliffe and White[19] think that unconsciousness is less apt to occur with thrombosis, and that thrombosis is usually less immediately fatal than hemorrhage. Harding[18] feels that sudden hemiplegia, or monoplegia, in a young or middle aged individual, when valvular heart disease is not present, is likely to be due to syphilitic thrombosis. It is noteworthy that Jones[24] found that thrombosis occurred during sleep more than twice and embolism nearly three times as often as hemorrhage. In the discussion of cerebral hemorrhage, the differentiation from cerebral thrombosis will be taken up in detail.

Merritt[1] has noted that cerebral thrombosis is rarely fatal within 24 hours, and those persons who are destined to die usually do so only several days or weeks after the time of onset. Wechsler's clinical observations[9] have warranted the opinion that the outlook for life in thrombosis, except that occurring in the basilar artery, is generally better than that in hemorrhage. Newbill,[25] in a recent report from the Charity Hospital, found that the survival period of fatal cases of thrombosis averaged 15 times longer than that of hemorrhage or embolism.

With the exception of those cases occurring on a syphilitic basis, the treatment can be considered in the discussion on cerebral hemorrhage. In those cases of cerebral thrombosis occurring in association with proved syphilis, dramatic results cannot be expected, according to Merritt,[1] from the treatment of the lues, because most of the symptoms in such cases are due to softening of the brain tissue resulting from occlusion of the vessel. In the usual case the most that should be expected from antiluetic therapy is the possible prevention of further vascular lesions.

CEREBRAL HEMORRHAGE

The incidence of cerebral hemorrhage, as was stated in the series reported under the discussion on cerebral thrombosis (*v. s.*) is, contrary to former belief, definitely lower than that of cerebral thrombosis. Nevertheless, it is quite common, as will be noted.

Cerebral hemorrhage is invariably due to rupture of a vessel whose wall has undergone local and diffuse pathologic changes, and usually occurs past middle life. Diffuse cerebral arteriosclerosis may exist for a long time without leading to rupture of a vessel or, indeed, to any symptoms. There may be no diffuse arteriosclerotic changes, only one vessel showing typical changes which lead to hemorrhage into the brain.[9] With regard to pathogenesis of spontaneous intracerebral hemorrhage, current writers apparently favor the hypothesis advanced by Globus and Strauss[26] in 1927, which stated that cerebral hemorrhage represents a terminal phase in a sequence of events which have their beginning in a generalized or somewhat localized disease of the cerebral vessels and which results in the closure of one or more of such vessels in a given circumscribed area. This leads to the creation of an ischemic zone and a consequent focal encephalomalacia. With the production of such cerebral softening, an area of diminished resistance is created which is an important, if not a determining factor, in the causation of cerebral apoplexy. This seems to be an essential precursor to the rupture of the vessel wall and the unhindered escape of blood. In explanation for cerebral hemorrhage occurring in cases of long-continued essential hypertension without evident arteriosclerosis, Chase[27] concluded that even large hemorrhages may occur in the brain by diapedesis from "terminal districts" and from the vasa vasorum of hypertrophied paralytic muscular arteries. Jelliffe and White[19] feel that exciting causes are of doubtful importance in precipitating cerebral hemorrhage, and in finding that the right and left hemispheres are about equally involved, they upset an old but unsubstantiated belief of right-side preponderance.

The commonest cause of cerebral hemorrhage is arteriosclerotic vascular change. Other common causes are syphilis (much more commonly associated with thrombosis), and generalized intoxications (as lead and alcohol).[9] Geiger[28] and others[29, 30, 31] have reported purpura hemorrhagica as a cause of cerebral hemorrhage. Marburg[32] has found that cerebral hemorrhages in youthful individuals are due to toxic, or toxic infectious, changes in the walls of the blood vessels. Harris[33] and Wechsler[9] are very definitely of the opinion that there undoubtedly exists an hereditary and familial tendency or constitutional predisposition to the development of cerebral hemorrhage.

SYMPTOMS

With few exceptions every case of cerebral apoplexy is ushered in by a stage of coma.[9] Premonitory symptoms[34] are not characteristic of the lesion; as a general rule they are recorded in the milder types of apoplexy in which the onset is not abrupt. Generally loss of consciousness is quite sudden,[35] deepens very rapidly, and attains its maximum in a short time. According to Cadwalder,[34] it is doubtful if hemorrhage ever occurs without causing very distinct disturbances of consciousness, but it is certain that many softenings on a thrombotic or embolic basis do occur without producing distinct apopletic attacks. The pulse rate generally is slow and full. The pupils are either normal in size or

dilated, but do not react to light. The abolishment of the corneal reflex may be a very valuable early diagnostic sign in hemiplegia and is of great significance when no hemiplegia is evident or when the cause of coma is in doubt.[9] It is important to remember that the urine voided during an apoplectic stroke frequently contains albumin and sugar. Very early the superficial abdominal and the cremasteric reflexes are abolished on the paralyzed side. Although practically all forms of acute hemiplegia are flaccid in the beginning (generally up to six weeks) there is a rapid return of deep reflexes and soon they become hyperactive on the paralyzed side.[9] Permanently flaccid hemiplegia may rarely occur. Wilson[4] has observed that the sensation is not affected in the average case of hemiplegia, although it may be, if the thalamus or the posterior limb of the capsule is involved. Wilson[4] also points out that many cases of apoplexy occur in patients with low blood pressure.

Hemorrhage may occur in any part of the brain. According to Neely,[36] 60 per cent of cerebral hemorrhages are from the lenticulostriate and lenticulo-ophthalmic arteries. The different vessels are involved in about the same order of frequency as listed under thrombosis (*v. s.*). It is worthy of mention that thalamic cases are frequently attended with marked coma which may be very protracted even in the absence of definite hemiplegic signs. Hemorrhage is rare in the cerebellum and rarest in the medulla.[9] The spinal fluid in intracerebral hemorrhage, as a rule, is the same as that found in thrombosis and embolism, according to Wechsler.[9] Neely[36] has stated that even patients with very extensive hemorrhages which are progressive until they cause death may not be associated with a marked increase in spinal fluid pressure.

Intraventricular hemorrhage, according to Oppenheim,[37] usually is the result of a neighboring hemorrhage which has broken through the ventricular wall and has filled all the cavities. Primary ventricular hemorrhage occurs only rarely. Gowers[38] feels that when primary ventricular hemorrhage occurs it is due in most cases to rupture of miliary aneurysms, which have been found in the choroid plexus. Jelliffe and White[19] find that in cases of cerebrovascular accident that go into deep coma with marked rise in temperature (103-105°), with twitching or convulsive jerks, very slow or rarely rapid heart action, irregular and rapid breathing, and blood in lumbar puncture fluid, the hemorrhage has probably extended into the ventricles. Most authorities[39] acknowledge that a small number of cases of intraventricular hemorrhage recover, but death is usual within 24 hours.[24] Sands[40] had a case in which lumbar puncture did not reveal a bloody fluid and when the patient died one hour after onset of the symptoms a large blood clot filled the ventricular system. The prognosis is about 100 per cent fatal. Alpers[41] in 1924 reported a patient who recovered in whom frequent spinal drainage was used.

DIAGNOSIS

In the differential diagnosis of cerebral hemorrhage it is necessary to consider all conditions which may lead to stupor or coma. No doubt the diagnosis of uremia is made too frequently. It is important to emphasize that a patient suffering from brain tumor may have a hemiplegia of apoplectic suddenness due to a hemorrhage into the tumor.[4] McDonald[42] finds that cerebral embolism is more sudden and more dramatic in its onset than hemorrhage. By far the most important differentiation is between cerebral hemorrhage and cerebral thrombosis. Aring and Merritt's excellent article[43] on this subject will be used as the authority for most of the following statements. There is no one clinical sign that will differentiate the two. In the differentiation of cerebral hemorrhage and cerebral thrombosis, the type of onset is important. An onset with immediate unconsciousness is twice as frequent in hemorrhage as in thrombosis. Also convulsions at onset are more frequent with hemorrhage. Vomiting, if present at the onset, and, if embolism is excluded, is usually indicative of cerebral hemorrhage. Stiffness of the neck is an important differ-

ential sign between cerebral hemorrhage and cerebral thrombosis, for it is present in 55 per cent of cases of cerebral hemorrhage[43] and in only 7 per cent of cerebral thrombosis. The colloidal gold curve has no differential value in the diagnosis of these or other cerebral vascular lesions. Signs of progression after onset are more frequent in hemorrhage. The initial temperature, pulse and respiratory rates, are not of much value in the differentiation of cerebral hemorrhage and cerebral thrombosis.

Ernstene[44] emphasizes the fact that cerebral hemorrhage may be encountered in a relatively young person who presents no evidence of generalized vascular disease and in whom the blood pressure has been within normal limits.

PROGNOSIS

It is well to emphasize here the fact that cerebral hemorrhage rarely, if ever, is the cause of sudden death.[9, 25, 43, 45, 46] Cadwalder[34] thinks that large hemorrhages are always fatal. Jones[24] considers the immediate prognosis in hemorrhage much worse than in thrombosis. Robinson[47] concludes that, even though walled off, intracerebral hemorrhage is almost invariably fatal. He states that the brain does attempt to wall off pathologic foci. Jelliffe and White[19] list as unfavorable signs generalized convulsions, retinal hemorrhage, blood in the spinal fluid, and bilateral paralysis. After recovery from coma, continued fever, advancing symptoms, restlessness, delirium, or loss of sphincter control indicate a grave prognosis and probable death in from two to three weeks.[48] Wilson[4] reports a steadily rising temperature as an unfavorable sign. Wechsler[9] states that if the patient does not die in coma, the stupor lessens, reflexes reappear, nonparalyzed limbs are moved, the pulse quickens, and temperature rises for a day or two. A sharp fall of temperature is of grave prognostic significance. McDonald[42] states that coma lasting more than 48 hours is a very bad sign. Aring and Merritt[43] state that the usual findings in cases of any type of cerebral vascular lesion include a uniform rise of temperature, pulse rate, and respiratory rate several hours or days before death occurred.

With regard to the outlook for recovery from the most common neurologic finding, hemiplegia, a complete recovery is not to be expected when the coma is very deep and of long duration. If there is no sign of recovery in one week and no palpable return of power within a month, the outlook is bad. Conversely, early return of power within a few days speaks for rapid and complete recovery.[9] Jelliffe and White[19] report that hemiplegia, if total, is apt to persist, in some degree at least, although most patients are able to get about in three months or more. Partial recovery from helplessness persisting over six months or a year has been reported. Facial palsies usually disappear. Sachs[49] has observed that palsy of the leg is rarely as persistent as that of the arm. Aphasias are usually recovered from. Intelligence tests should be given in all cases of cerebral vascular accidents after the sensorium has cleared. Grave intelligence defects may occur, and according to McDonald,[42] some reduction in mental efficiency is frequently seen. Wechsler[9] emphasizes the important fact that many aphasiacs remain intelligent. Another point brought out by Wechsler[9] is that if hemiplegia recedes very rapidly the possibility of general paresis or multiple sclerosis should be borne in mind. The extensor of the fingers, as a rule, shows least return of function of any of the muscle groups involved in hemiplegia.

TREATMENT

The treatment of a patient with cerebral hemorrhage may be divided into the early, or immediate, treatment, and the late, or convalescent care. Measures of treatment, generally agreed upon, are slight elevation of the head, dehydration, mild sedatives for restlessness, careful feeding, and complete bed rest for at least three weeks after onset. There is some difference of opinion as to when to use venesection. All agree that obvious anemia contraindicates this procedure. Wilson[4] and Ernstene[44] believe in

its routine use in initial treatment. Jelliffe and White[19] reserve it for patients in very deep coma. Apparently the majority favor the opinions of Merritt,[1] Friedman[30] and Wechsler,[9] who feel that this procedure may be of value in plethoric individuals only. The question as to use of therapeutic lumbar puncture is far from settled, but even those who advocate it, as a rule, add a note of caution. A few representative opinions will be given. Jelliffe and White[19] feel that it is rarely called for except in supposed traumatic cases. McDonald[42] states that it may be dangerous. Merritt[1] is of the opinion that lumbar puncture is of doubtful value in the treatment of the average case of cerebral thrombosis or hemorrhage, but that it may be of value in relieving symptoms and signs of increased intracranial pressure. He states that punctures should be repeated in cases where large amounts of bloody fluid can be removed, e. g., intraventricular bleeding. Wechsler,[9] too, feels that intraventricular bleeding is an indication for repeated taps. Ernstene[44] and Sachs[40] believe that while spinal puncture is not without theoretical risks, careful removal of sufficient fluid to reduce the pressure is advisable.

Recent investigation on the function of the pyramidal tracts makes the outlook for re-education treatment of hemiplegia much more hopeful. It seems that the pyramidal tracts are not exclusive carriers of volitional motor control.[51, 52, 53] The indications are that there is a large extrarolandic motor area, probably in the frontal and parietal lobes, particularly for the face and upper extremities; so accessory pathways may be brought into play. Wechsler[9] finds that early attempts should be directed toward prevention of contractures and that after the first few weeks gentle massage may be begun and later passive movements of all joints. Merritt[1] is of the opinion that much is accomplished by efficient physio- and psychotherapy. Singer and Low[54] reported a patient with complete absence of the hinder parts of the second and third frontal convolutions who was able by persistent training ultimately to accomplish an almost unbelievable amount. Treatment with electricity has been declared of doubtful or no value.[1, 4, 19]

Surgical procedures here, as in most other conditions, come in for consideration. Wechsler[9] declares that Foerster's operation of cutting posterior sensory roots to overcome spasticity is of limited worth, but may be employed in selected cases. Bagley[55] in 1932 reported cases and considered that superficially located lesions of cerebral hemorrhage may be helped surgically. He admits that it may be difficult to find the focus of bleeding. Suffice it to say that since the original article no further reports can be found. Adson and McK. Craig[56] made an interesting report of the successful removal of encapsulated intracerebral hemorrhage simulating brain tumor.

THE THERAPEUTIC USES OF IODIDES

Due to the prevalent use of iodides by the medical profession a paper on cerebral vascular accidents would not be complete without a discussion of the use of these drugs. Currently, authorities either do not mention it in their writing on therapy, or when they do mention it, a statement is added that there is probably no adequate basis for its employment. In an attempt to form an opinion on the usage of this drug in cerebral vascular accident cases based on present day concepts, one is forced to the single conclusion, namely, that iodide medication affords an excellent means for group (family) therapeutics.

SUMMARY

A review of the literature on spontaneous subarachnoid hemorrhage, cerebral embolism, cerebral thrombosis, and cerebral hemorrhage, has been presented. Particular emphasis has been placed on the differential diagnosis, prognosis, and treatment of these conditions. It is hoped that this presentation impresses the physician with the importance of diagnosing specifically the type of a cerebral vascular accident rather than labeling it "cerebral hemorrhage" or "cerebral accident."

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VINCENT'S CERVICITIS*

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Although the fusiform bacilli and spirochetes of Vincent are commonly found in the oral cavity, disease due to these organisms in other sites is comparatively rare. Weaver and Tunnicliff have established

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that Vincent's organisms may locate symbiotically and ontogenetically on other sites than the mouth and may give rise to symptoms in these sites. Vincent's infection of the genital tract is a very rare occurrence.

Pilot[1] was able to find the fusiform bacilli and spirochetes in the smegma of 58 per cent of normal women, but in none of his patients were organisms found in the vaginal tract. He reports one case of a nine year old girl complaining of a foul-smelling, sanguino-purulent vaginal discharge of three months' duration. On examination he found a hairpin in the vagina. A smear of the discharge showed many spirochetes and fusiform bacilli along with other organisms. Arnold[2] reports a case of Vincent's infection of the vagina in a 35 year old woman following a Vincent's gingivitis.

CASE REPORT

A. G., a 36 year old colored female, was admitted into Kings County Hospital on the night of June 30, 1938, complaining of severe pelvic and lower abdominal pain which had been present since the onset of her menstrual period six days previously.

Her menstruation began at the age of 18, was regular, of the 30 day cycle, and each period lasted three days except the present one which was in its sixth day. She always had low abdominal pain and discomfort throughout each period. Although no contraceptives were used, she had never become pregnant. She was a known luetic under active treatment, and had received injections of neoarsphenamine at weekly intervals for ten weeks prior to her present admission.

Physical examination revealed a well developed colored female who did not appear to be acutely ill. The abdomen was tender throughout, but there was no rigidity or rebound tenderness. There was a scant, bloody vaginal discharge. On bimanual examination the cervix was enlarged, smooth, hard, and on its surface shallow, crater-like irregularities could be felt. It was exquisitely tender to manipulation. The uterus felt normal, and the adnexae felt full and tender. On inspection the cervix appeared to be markedly ulcerated, the ulcers being covered with a moist, dirty, gray, foul-smelling membrane that would not peel off with ease. The membrane had spread to cover a considerable portion of the vaginal mucosa of the cervix, but the adjacent lateral walls of the vagina were not involved. Smears and darkfield examinations of this membrane were positive for Vincent's organisms. The Wassermann and gonococcus fixation reactions were also positive.

After further questioning, the patient admitted that her husband utilized his saliva as a lubricant for intercourse. Smears and darkfield examinations were then made from the gums of the patient and her husband and both were positive for Vincent's organisms although no macroscopic ulcerative lesions were noted in their oral cavities.

On July 1, 1938, the cervix was painted with a two per cent aqueous solution of gentian violet, and at two hour intervals, one ounce of hydrogen peroxide was instilled into the posterior vagina through a rubber catheter. The cervix was repainted with gentian violet once or twice daily and the peroxide instillations were continued. Each time the cervix was painted as much of the membrane as possible was removed.

Thirty-six hours after admission the patient had shown marked symptomatic improvement. The abdominal pain had markedly diminished and the cervical tenderness had decreased. There was no new membrane formation, and the underlying inflammation seemed to be subsiding. By the next day the cervical lesions appeared to be smaller and more discreet. The subsequent course was one of progressive improvement.

On July 12, twelve days after admission, there was no cervical tenderness. All the membrane had disappeared, and the remaining ulcerated areas had a clean, granulating base. On the advice of our Dental Department the gentian violet applications and peroxide instillations were discontinued because of the belief that their optimum effect had been reached. The cervix was then painted with a two per cent solution of arsphenamine in glycerine at intervals of one to two days.

On July 21, three weeks after admission, there was no evidence of the infection noted. The cervix had a normal appearance and the cervical smears had been repeatedly negative for a week. The patient was discharged as cured and advised to discontinue the use of saliva as a lubricant for intercourse.

Unfortunately, we have been unable to follow up this patient since her discharge from the hospital.

COMMENT

This case presents, aside from its rarity, several very interesting features. First is the mode of transmission. While the evidence is not conclusive, it is reasonable to believe that in this case the Vincent's organisms were introduced during intercourse through the husband's saliva. The habit of using saliva as a lubricant for intercourse is not uncommon. Since observing this patient, whenever the opportunity presented itself, we have tactfully questioned a number of clinic patients concerning this

practice and find that it is by no means rare. With the frequency of Vincent's gingivitis among these people it is surprising that genital lesions are not seen more often. Apparently there are other factors which predispose to the infection. In this case it may have been the lowered resistance offered by the menstrual period.

While the treatment in this case was quite satisfactory, undoubtedly any other of the standard treatments for Vincent's infection would have worked as well. We feel, however, that the instillation of hydrogen peroxide into the posterior vagina at frequent intervals is particularly suited to this type of case as it allows continuous oxygenation of the vaginal cavity, and thus tends to prevent further progress of the anerobic Vincent's infection.

Another interesting feature in this case is the fact that although the patient had received ten injections of neoarsphenamine, a drug supposedly specific against the organisms of Vincent, she developed this infection. It was for this reason that arsenicals were not used earlier in the case.

SUMMARY

1. A case of Vincent's infection of the cervix is presented.

2. The history of use of saliva from infected gums as a lubricant for intercourse suggests a mode of transmission from the oral to the vaginal cavity.

3. The case was successfully treated by topical applications of gentian violet and instillations of hydrogen peroxide into the posterior vagina. When the acute symptoms had subsided, topical applications of arsphenamine were used.

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THE TREATMENT OF TULAREMIA WITH THE THIAZOLE DERIVATIVES OF SULFANILAMIDE

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During the past winter we have observed a group of unusually severe cases of tularemia.

The observation of a patient with extensive infection involving both lungs who had not responded to treatment with sulfapyridine and sulfanilamide prompted us to determine the efficacy of sulfamethylthiazol. The marked improvement of the patient within four days after institution of treatment was striking.

We thus felt justified in further clinical trial and are making a preliminary report of our results in five cases.

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CASE NO. 1

C. D., a 24 year old negro was admitted to the Charity Hospital of Louisiana at New Orleans on December 3, 1939, with cough and fever of five days' duration. He had a temperature of 103.4°F. and x-ray evidence of consolidation of the lower lobe of the left lung. Therapy with sulfapyridine was started although repeated examinations of sputum did not reveal pneumococci. In spite of the fact that blood levels of free sulfapyridine varied from 4 to 6 mg. per 100 c. c., the patient's condition became progressively worse and there was extension of infection to the right lung. Sodium sulfapyridine was then additionally given intravenously in a dosage of 4 grams once daily. After treatment with sulfapyridine had been continued for eight days and with sulfanilamide for five days without any improvement in the patient's condition, therapy with sulfamethylthiazol was instituted. By this time a diagnosis of tularemia had been established by inoculation into guinea pigs of blood, sputum and material obtained by lung puncture. His temperature was 105° and his pulse rate 160 per minute. He was stuporous and definite jaundice was present. Within four days after the latter drug was given, marked improvement in his general condition was noted, with a falling temperature which reached 99° by the sixth day

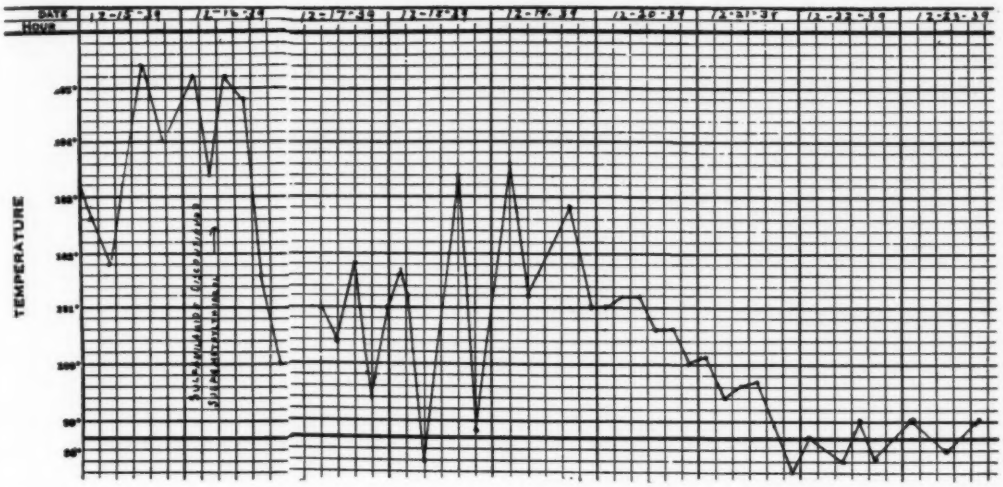

Fig. 1. Case 1. Temperature curve beginning on day before therapy with sulfamethylthiazol was instituted. At the time condition of the patient was considered critical.

(fig. 1). Recovery was uneventful. A total of 67 grams of sulfamethylthiazol was given over a period of 15 days without any evidence of toxic effects.

COMMENT

This patient had a very severe type of tularemic pneumonia with septicemia as evidenced by positive guinea pig inoculations of blood, sputum and material obtained by lung puncture. The rapid improvement within four days seemed to indicate that this drug was definitely beneficial.

CASE NO. 2

A. R., a 61 year old colored female was admitted on December 15, 1939, complaining of pains in the left hand and elbow. After cleaning rabbits on November 23, 1939, she developed a sore on her left hand which was accompanied by regional epitrochlear lymphadenopathy and fever. A diagnosis of tularemia was established from the above findings and a positive blood agglutination for *P. tularense* in a dilution of 1:160. An x-ray of the lungs did not reveal any pulmonary involvement. Sulfanilamide was given for five days with no apparent clinical improvement and therapy with sulfamethylthiazol was then instituted. Fourteen grams of the drug were given during a period of 60 hours. The temperature fell to normal within 12 hours. Recovery was uneventful.

COMMENT

This case represented a mild type of ulceroglandular tularemia without complications, that responded to drug therapy.

CASE NO. 3

T. B., a 30 year old white male was admitted on January 7, 1940 complaining of pain in the chest, cough and headache. He had an ulcerated lesion on the middle finger of the right hand with regional epitrochlear and axillary lymphadenopathy. X-ray examination revealed several small areas of consolidation in the lower lobes of both lungs. There was a history of handling rabbits four days prior to the onset of his illness. The diagnosis of tularemia was established by repeated blood agglutinations for *P. tularense* in a dilution of 1:640 and a positive intradermal test with Foshay's tularense antigen.

Treatment with sulfamethylthiazol was instituted on the seventh day of hospitalization and was followed by marked response within 24 hours as shown on the accompanying chart (fig. 2).

Although the fever had subsided, drug therapy was continued in full dosage because of persistent lymphadenopathy. On the ninth day of treatment the patient developed a granulocytopenia and a diffuse maculopapular eruption over the abdomen, back and thighs. The total white blood cell count was 9,750 per cubic millimeter, 32 per cent of which were neutrophiles. The drug was discontinued. The rash disappeared in forty-eight hours and the white blood cell count returned to normal within four days. Recovery was uneventful and complete. A total of 97 grams of the drug had been given.

COMMENT

The marked clinical response in this case is shown by the fever curve. The toxic rash and granulocytopenia developed after nine days of treatment with massive dosage. These toxic effects were transient and disappeared when the drug was discontinued.

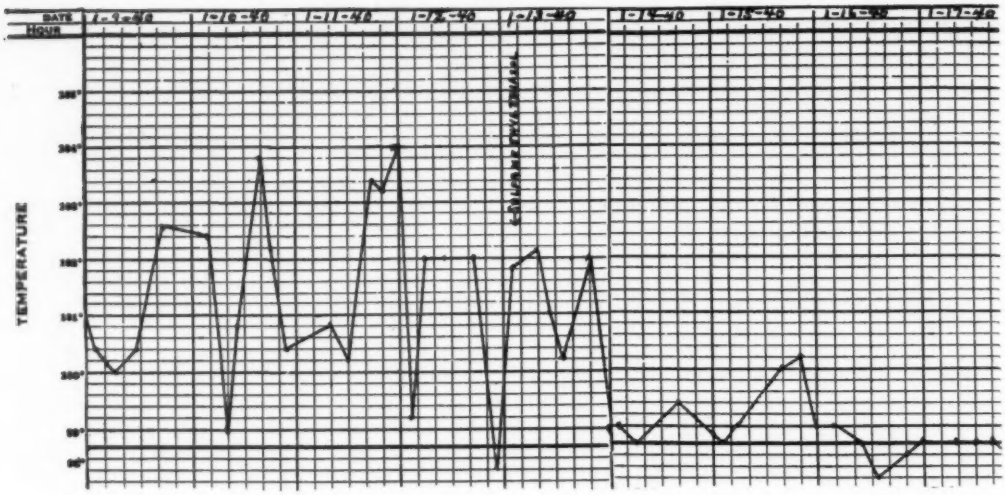

Fig. 2. Case 2. Temperature curve is shown to demonstrate typical curve for several days preceding the administration of sulfamethylthiazol. This curve and that of case 1 are temperature charts of patients who showed the best response to sulfamethylthiazol therapy.

CASE NO. 4

M. G., a 26 year old negro was admitted on January 16, 1940, complaining of chest pain, fever and cough. He had fever of 102°F., and x-ray evidence of consolidation of the lower lobe of the right lung and an area of pneumonitis in the lower lobe of the left. Type X pneumococci were demonstrated in the sputum. He was given 100,000 units of anti-pneumococcal rabbit serum intravenously and started on full doses of sulfapyridine. Within twenty-four hours his temperature dropped to 99° but rose again to 103° and his condition became progressively worse. Blood agglutinations for P. *tularense* were positive in a dilution of 1:640. After twelve days of therapy with sulfapyridine blood levels of 6 to 7.5 mgm. having been maintained, he showed no response and was in a stuporous condition. Sulfamethylthiazol was then given in one gram doses every four hours following the initial doses of two grams each. He received a total of 30 grams of the drug over a period of six days with no apparent response. Jaundice was noted on February 1, 1940, four days after the drug was started. He did not receive any drug after February 2, 1940, because the supply had become exhausted. He expired on February 4, 1940, and on postmortem examination was found to have extensive tularemic lesions in both lungs, liver, spleen, abdominal and hilar lymph nodes. The etiology of these lesions was proved by guinea pig inoculation.

COMMENT

This patient had a severe type of tularemia. Although there seems to have been a coincidental pneumococcal pneumonia, subsequent clinical and postmortem findings proved the presence of tularemia. It is probable that the jaundice occurred as part of the terminal picture of the infection. Treatment with sulfamethylthiazol was started late in the disease and was given in relatively small dosage.

CASE NO. 5

D. S., a 30 year old negro was admitted on January 18, 1940, complaining of severe pain in the chest, cough and fever of nine days' duration. He had a temperature of 103°F. and x-ray evidence of an area of consolidation in the upper lobe of the left lung. His employment in a market where he skinned rabbits suggested the possibility of tularemia which was verified by a positive blood agglutination for *P. tularense*, in a dilution of 1:640, a positive intradermal test with Foshay's tularense antigen and by guinea pig inoculation with material obtained by lung puncture. On the ninth day in the hospital, the eighteenth day of his illness, treatment with sulfathiazol was instituted. After 25 grams of the drug was administered during a 60 hour period of time, there was noted a marked granulocytopenia, the neutrophiles dropping to 15 per cent of the total white blood count of 7,800 per cu. mm. There had occurred, however, a definite clinical improvement with a drop in temperature to 100.2° F.

The drug was discontinued and the neutrophiles rose daily to reach normal levels in three days. There was continued clinical improvement, the fever remaining below 100°. Pulmonary infection persisted, however, as shown by x-ray study and low grade fever.

COMMENT

This case represented a moderately severe type of tularemia which responded to the use of sulfathiazol. However, he developed a toxic reaction as evidenced by granulocytopenia necessitating discontinuance of drug therapy after only 60 hours of treatment.

DISCUSSION

The usual routine of treatment consisted in the administration of 1 gram of the drug at four hour intervals with the exception of two or more initial doses of 2 grams each. Urinalyses and blood cell counts were performed daily. Granulocytopenia was observed in two cases and a toxic drug rash in one. These toxic effects subsided rapidly after discontinuance of the drug. Although jaundice developed in case 4 several days after drug therapy was instituted, we believe that it was a result of the infection. We have observed jaundice in other severe cases of tularemia which were not treated with these drugs.

In our opinion the definite response of four of these cases to treatment with sulfamethylthiazol* and sulfathiazol justify the further use of these drugs in the treatment of tularemia.

*The drugs used in this study were supplied by the Medical Research Department of the Winthrop Chemical Company.

MODERN MEDICAL ILLUSTRATING*

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Lest the title of this paper imply a discussion of the technical aspects of medical illustration, I would like to relieve your mind at the outset and assure you that what I have to say will be confined to the subject in its broader sense only. Mr. Max Brodel, dean of medical artists, once said that we would have better pictures if doctors knew more about art and artists more about medicine. At any rate, we have a lot of common interests and it is about these that I would speak. No consideration of medical illustration should be attempted without acknowledging that its existence, as we know it today, is due to the development of photo-engraving which did away for all time with the painfully wrought, stiff woodcuts of the last generation. Some of you here can recall from your student days these old pictures in the early editions of Gray's Anatomy and Ashhurst's Surgery. Although photo-engraving provided machinery for the printing of pictures, two other factors have accelerated their wide use today. One of these is the realization of the value of visual education; the other is the increased speed of living—the swift tempo of our times. The busy practitioners of medicine these days have little leisure for the reading of page after page of unrelieved descriptive text, the meaning of which can often be more precisely conveyed in pictures, and in a fraction of the time. However we may at times deplore the passing of the peaceful times when life was less complicated, we'll admit that illustrations have become a mighty factor in the teaching and dissemination of medical knowledge. Indeed, book publishers and journal editors are so well aware of this that it has become an important consideration in the acceptance of manuscripts. Many an otherwise good book of recent years has languished and died from lack of proper illustrating. The editors of the Wistar Institute journals say in their booklet on advice to authors: "Graphic representation of structural conditions is often the best and sometimes the only way to present facts." To this I may add the old Chinese adage: "One picture is better than a thousand words."

Perhaps the best definition of the word "illustration" is "that which illustrates." Its meaning is sometimes lost sight of by those of our profession. As I look back across much of my own work extending now over a period of 36 years, I am aghast at the evidence that this simple fact did not seem to occur to me earlier.

REQUISITES FOR GOOD MEDICAL ILLUSTRATIONS

What, then, are the factors which enter into the making of a good medical illustra-

*Read before the Orleans Parish Medical Society, February 12, 1940.

†From the Illustration Studios, University of Illinois Colleges of Medicine and Dentistry, Chicago.

tion? First, a thorough understanding of the subject to be illustrated. Second, design, and by design I mean the arrangement of the parts of a picture which best convey the meaning quickly, accurately and pleasingly. Without the quality of design no illustration—be it drawing, photograph or chart, can properly fulfil its function. Then it must have the golden quality of simplicity. It must be free from all detail and evidences of labor which do not contribute to its meaning. It must be honest and accurate. In a word, it must illustrate. Here may I remind you that the original of an illustration is of little value in itself. It is the reproduction, the result on the printed page which counts. This obvious fact is often lost sight of because we do not take into consideration the suitability of a picture for reproduction. Many authors are made sad by seeing the pictures which they sent to the publisher and which were so beautiful to them at the time, appear finally much reduced in size, anemic in appearance, and vague in meaning. The experienced medical artist early learns that he must do his work with the printed result constantly in mind. He learns that it must be made with a vigilant eye as to what will happen in the engraving room, and to allow for certain losses due to reduction in size and the vicissitudes of engraving and printing.

If one contemplates the elaborate and mysterious process through which an illustration must pass on its journey from the author to the printed page, he may marvel that the result is recognizable. It would probably bore you were I to attempt to describe this in detail. It might be interesting, however, to follow briefly a typical journal article which has been accepted for publication and illustrated, let us say, with a pen and ink drawing and a photograph. First, the author's pictures are marked in the editorial office for size of the finished cut, type of engraving, e.g., half-tone or line, and then sent to the engraver. Here they are marked for size of screen and type of finish, according to the quality of paper upon which they will be printed. The photograph is placed in front of a large camera and photographed through an interposed screen made of minute lines drawn at right angles to each other on glass. The number of these lines to the inch determines the fineness of detail in the reproduction. The purpose of this screen is to break up the picture into dots thereby producing a surface which can be inked and printed. The negative film so obtained is now transferred to a thin plate of copper which passes through several intricate chemical processes during which the image becomes delicately etched in the metal. After this plate has been tacked upon a block of wood it receives certain finishing touches which are done by hand under a magnifying glass. Several proofs are finally struck off on a hand press and sent to the editor of the journal, who in turn may send one to the author with the galley proof of his text. After corrections are made, if any, it is ready for the printing press. This is known as the half-tone process and is the one used in reproducing all drawings which are done with a complete scale of tones, such as wash drawings, photographs, and radiographs. About 65 per cent of the pictures in our American journals are reproduced in this way.

Our author's other picture, the pen and ink drawing, undergoes a process similar to the photograph except that it is somewhat simpler and no screen is used in photographing it. The finished film is etched on a zinc plate instead of copper, although for the finest grades of work copper is sometimes used.

This is "line engraving" and is the method used to reproduce drawings in pen and ink, graphs and all material which has been rendered in pure black and white. It has many virtues and although more limited than the half-tone it is more economical and can be printed on almost any kind of paper. About one-third of our illustrations are engraved by this line process. Plus the 65 per cent of half-tones, these two methods constitute about 98 per cent of all pictures in American medical publications. The remaining two per cent will be divided between color engraving and the more costly forms of black and white reproduction, such as lithography, heliotype and photogravure.

COLORED ILLUSTRATIONS

Medical pictures in color are exceedingly desirable. In many ways it is the ideal type of illustration for depicting pathologic changes, both gross and microscopic, as well as in differentiating anatomic structures. Although black and white is adequate for the great mass of pictures and has a superiority and charm of its own, in many cases, certainly where maximum realism is desired, full color pictures are supreme. A colored illustration is almost as easily made by the artist as one in black and white and can be reproduced without any particular difficulty. The great drawback is the cost. I am sure that most journal and book publishers would encourage the use of color illustrations if they could afford to print them. As it is, many journals such as the Journal of the American Medical Association will not use them at all. Others, such as Surgery, Gynecology and Obstetrics, will use them at times with an arrangement whereby the author will bear all or part of the extra expense. This cost to the author alone is not inconsiderable and usually runs from $200.00 up for a single picture. We medical illustrators try to explain this to our customers when they come to us excited and enthusiastic about a nice polychromatic tumor they have just removed. Needless to say, the drawing is usually made in black and white, albeit with regret by both of us. All of this may sound discouraging to the author, because there are many instances in which color is necessary, but facts are facts and we must be guided accordingly. It has been my experience that in spite of the high cost, medical book publishers generally use as many colored illustrations as they can without increasing the cost of their product. The question is often asked, "Why do the foreign books and journals have so many more colored illustrations than ours?" The answer is cost of labor. We have to pay our workers in the engraving and printing trades much higher wages than they do abroad. The plates alone for a single colored picture costing a European publisher say $50.00 would cost an American publisher around $150.00.

May I now present a few practical considerations about the everyday problems in medical illustration. A while ago I mentioned some of the qualities which a good picture must possess. In addition to these qualities, there must be one thing more, proper labeling. One sees year after year many drawings, photographs and charts in our journals and books inadequately and poorly labeled. Perhaps the reason for this is that we too often publish illustrations predicated on the fallacy that the readers are as familiar with the subjects as we are and their intelligence must not be insulted by labels. The contrary is true. There is every evidence that the reader appreciates good labeling. It helps to make the picture understandable and like the illustration itself is evidence of the care and accuracy of the author's methods. Often even a word, letter, or arrow on a photograph or radiograph adds meaning and significance to a picture which would otherwise have dubious value to the reader. Labeling is no mean art. It requires judgment and skill, and when properly done, often adds to the appearance of a picture. By the same token, bad labeling can spoil a good picture. Graphs and charts are dependent upon good labeling to a greater degree than any other class of illustrations. They are by their nature usually rather drab and monotonous in appearance, but designed and lettered by an expert they become lucid and interesting and are much more apt to invite study.

PHOTOGRAPHY

Perhaps the most backward and undeveloped division of medical illustration today is photography. We artists have a lot to learn, but the average medical photographer has still more. Anyone at all critical, scanning our medical journals, must be conscious of the large percentage of photographs too dark, too light, badly composed, vague and confusing. The editors and publishers realize this but there is not much they can do about it. Improvement must come from higher standards at the source, through better trained photographers and more critical authors. We have already made a start in this direction and in some of our institutions routine medical photog-

raphy has reached a high state of excellence. I think I may say that an example of this is at my own school (Illinois) where, as a result of constant experimentation and much experience with a wide variety of material, very high standards now prevail. True medical photography is a definite specialty and one not easily learned. It is an exacting profession and requires training and certain qualities far beyond that of the portrait or commercial photographer. A good medical photographer is a craftsman of the first order. He has, to his work, much of the critical attitude of an able medical artist—and he is not content to let work leave the studio unless it measures up to the highest standards.

Of course, the services of a trained medical photographer are not always available, but even the amateur should remember that a photograph intended for reproduction should be sharply focused and the subject so lighted that its form and surface texture are recorded truthfully. Care should be taken that the background be simple and of contrasting tone, if possible, not as one so often sees, cluttered up with laboratory paraphernalia, half open doors and smiling nurses.

I would like to extend these remarks to cover motion picture photography in medicine, but it is too big a field to comment on more than briefly. Perhaps it is sufficient to mention a few points which a good many years of experience and inquiry have taught me:

(1) Medical motion pictures have not supplanted or materially affected any other teaching medium. They exist in their own right as a valuable addition to the machinery of teaching.

(2) An unfortunately large percentage of amateur and some professional medical movies have little sound teaching merit and are woefully time-consuming.

(3) Their entertainment value should not be confused with their teaching value—there is a big difference.

(4) As a teaching medium, motion pictures are valuable in direct proportion to their ability to show facts which cannot otherwise be demonstrated.

RADIOGRAPHS

I am sure that if the collective voice of the medical editors could be heard on this point, it would say something as follows: "Send in no prints for publication unless they are very good and unless they can stand reduction and dimming due to the half-tone screen." It is unfortunate that authors do not realize the importance of this. They seem prompted more by their enthusiasm as they look at the film in the shadowbox under perfect conditions than by its suitability for the printed illustration. Unless your radiographic print will reproduce so clearly that it cannot possibly be misinterpreted, it is usually better to use a simple outline drawing in pen and ink instead. You may be very sure that such a tracing properly made from the film will look better with your text and convey its meaning to the reader far more quickly and effectively. Sometimes, in order to get a good reproduction from a poor film, retouching is employed. This is a practice to be deplored in almost every case since the validity of the film is destroyed and the retouching which has been done will usually be evident in the finished cut.

The increasing demands of visual education in medicine have resulted not only in more and better published pictures, but in illustrative material to augment lectures and demonstrations. In a few minutes I shall try to demonstrate on the screen some salient points regarding the making and use of lantern slides. But first, a word about exhibits. This is the youngest branch of medical illustrating and it is growing so fast that we can hardly keep up with it. Already the scientific exhibits shown at the annual meetings of the national and state organizations as well as many sectional groups have just about become the major attraction. In the field of public health education also, exhibits designed for lay audiences are becoming more and more the responsibility of medical institutions. Here too, the old standards have gone by the board and today successful exhibits must be carefully designed to present the subject simply, clearly and graphically with a minimum of reading matter. If it is attractive

and easy to comprehend, it will invite inspection and study; if not, many will pass it by.

These, then, are some of the matters which concern us both. In trying to cover so much territory, I have run the risk of boring you and having made nothing very clear. On one point though, I can assure you: We medical illustrators are becoming more conscious of our part and our responsibility in medical teaching. You of the medical profession will agree, I am sure, that the best we can do is none too good. A picture once published cannot be recalled, but stands for all time as evidence of the part we played in the advancement of human knowledge.

FRANCESCO ANTOMMARCHI*

1780-1838

ROBERT GLENK†

NEW ORLEANS

Francesco Antommarchi was born at Marsiglia, Corsica, in July, 1780. He was of Italian parentage, but as the island had at that time become a portion of French territory, he was rightfully a Frenchman, as he considered himself to be.

He studied medicine in Italy, at Siena, Pisa, and Florence. In Florence, he became a pupil of the noted Italian anatomist, Paolo Mascagni, at the hospital of Santa Maria Meora. Later, he was called to the chair of anatomy in the famous college of that city, and eventually became one of the distinguished anatomists in Europe.

It was while he was engaged in editing and publishing Mascagni's works, after the death of the author in 1815, that he was implored and finally persuaded to become the personal physician of the Emperor Napoleon, in exile at the island of St. Helena, by Laetitia, the mother of the Emperor, and by her half brother, Joseph Fesch, Cardinal of Lyons. This was in 1819, after

Fig. 1. Dr. Francesco Antommarchi. Lithograph in possession of Bibliotheca Parsoniana.

Napoleon was already four years in captivity and was showing signs of serious physical impairment. Consent being given by the English authorities for his going on this mission, he set sail for St. Helena in that same year, in company with Father Vignati.

Interesting sidelights on the daily routine of the little court at Longwood were given by Dr. Antommarchi in his Memoirs and, at the same time, he exposed some of the stern realities of Napoleon's prison life. The doctor diligently treated the sick man and tried every means in his power to impede the progress of the dread disease, carcinoma of the stomach, that was gradually undermining the Emperor's constitution.

On May 5, at 5:50 p. m., 1821, his patient died. The autopsy was made at 2 p. m. on the following day by Antommarchi in the presence of seven British surgeons.

In his declining years, Napoleon drew up his will and named Generals Bertrand and Montholon his executors. So complicated

*Read before the Orleans Parish Medical Society February 12, 1940.

†From the Department of Natural Sciences, Louisiana State Museum, New Orleans.

Fig. 2. Deathbed scene of Napoleon Bonaparte, May 5, 1821, at 5:50 p. m. Print made from steel engraving of painting by Steuben, in Louisiana State Museum.

was his will, with four codicils, that confusion necessarily prevailed in its execution. Even the heroic General Montholon renounced his own legacy to obviate to some extent the difficulties in carrying out its provisions and to restore harmony and peace among the various heirs. He bequeathed to some score of persons the hair on his head, to be made into bracelets. Dr. Antommarchi was to receive a legacy of 100,000 francs, a sum expressive of Napoleon's gratitude for the devoted service rendered to him while living.

There was much jealousy among the surgeons at St. Helena and sharp controversy arose over the behavior of Antommarchi while there. The accusation was made that the doctor actually hastened his patient's death by his treatments. Be that as it may, the fact remains that those charged with the fulfillment of the Emperor's last wishes found technical reasons for ignoring them and the bequest to Dr. Antommarchi was never paid.

Bonaparte's suite, including Dr. Antommarchi, reached London August 5, 1821, and was treated with conspicuous attention by the English. Six weeks later, the doctor departed for Italy.

In the winter of 1824-25, Antommarchi brought out his famous memorial "Derniers Momens de Napoleon", which was warmly received by the sympathizers with the late Bonaparte. In it, the author gives an account of the molding of the death mask of Napoleon and makes various statements that have challenged criticism and unbelief. "His book is a tissue of vulgar boasting and deliberate falsification," as one English critic puts it.

The year 1826 saw the completion of a very pretentious work on human anatomy in two volumes, one of text and one of plates, entitled: "Planches Anatomiques du

Corps Human," F. Antommarchi; Publiée, Ct. deLasteyrie, Paris, 1826. The book is an elephant folio edition on Whatman paper and the plates are life size lithographic prints in marvelous detail of execution. A copy of this valuable work is in possession of the Tulane University Medical Library, the gift of Dr. H. Cenas.

Apparently Antommarchi was an ardent Bonapartist and undeviating in his devotion to everything in glorification of Napoleon's memory. By his sharp criticism of the treatment of the Emperor by the English, life was made so unpleasant for him in Europe that he finally decided to leave for New Orleans, to take up his abode. He sailed on the ship "Salem", from Havre, and arrived on the morning of November 9, 1834, at the levee in New Orleans.

Here he was met by a large deputation of prominent citizens, headed by Judge C. A. deMaurian, and was escorted to the public hall, where Dr. F. Formento welcomed him in elegant and feeling language as one who had loved France and had been devotion itself to the greatest military hero of his age. As New Orleans had been an American city for only a brief span of years, French enthusiasm was easily enkindled by fond memories of the past. He was made to feel at home among the people at once.

Fig. 3. House of Nicholas Girod, Chartres Street at St. Louis, New Orleans, where clinics for the poor were held by Dr. Antommarchi in 1834.

On November 28, 1834, Antommarchi had inserted an announcement in the New Orleans "Bee" that he would open two offices for medical treatment; one at the house of Nicholas Girod, at St. Louis and Chartres Streets, where the poor would be attended without cost, from 11 to 12 daily, and another at Mr. Carlos Trudeau's house, 13 Royal Street, where paying patients would be treated from 12 to 1 o'clock. The balance of the day was to be devoted to making sick calls.

For a time, the doctor was a great favorite, and patients flocked to him in large numbers and his practice was quite remunerative.

In the course of a year or so, Antommarchi's popularity began to decline, and the reason for this change of sentiment may be laid to his own indiscretion in the matter of conduct. Advertisements for patients began to appear in the newspapers, contrary to professional etiquette. He was charged with practicing homeopathy, which at that time was looked upon by allopaths as on a par with charlatanism. He openly boasted of being a man without religion—an atheist—a typical anatomist, and he was quoted as having said that in his many operations on humans, his scalpel had never discovered a "soul" and, hence, men have no souls. When attending the mothers and wives of the city, whose lives were guided by religious principles of the church, the doctor scoffed at their simple faith and derided their deep sense of pious duty.

No mention is made of anything concerning his private life, except to say that he was a poor man so far as worldly goods were concerned, as his right and just claims to his legacy from Napoleon were entirely ignored by the wife of Napoleon and the executors of the will. He had only his profession to fall back on and this, at one time, was quite lucrative. Now his income

was diminished and his admirers became fewer as time went on. And so the doctor, welcomed so jubilantly a few years ago, began to feel unappreciated and ill at ease in New Orleans. He left the city and sailed for Cuba early in 1838, and thus his name disappeared from the pages of Louisiana history. He died April 3, 1838, in Santiago de Cuba, and was buried there.

Antommarchi brought with him to New Orleans the chest of surgical instruments which he used at the autopsy on Napoleon. This chest was in possession of Albert Lieutaud until recently.

Antommarchi's distinction rests primarily upon his relationship to Napoleon in the closing years of his life and upon his claim to having fashioned the death mask which preserved for all time the features of the Emperor.

A narrative of the origin and strange adventures of this intimate relic of Napoleon may not be out of place in association with the biographic sketch of the man who lays claim to the making of it.

In his Memoirs, Antommarchi refers but briefly to the details of making the death mask. He says: "I was at a loss for lack of plaster when Dr. Burton indicated a layer of gypsum rock in a remote part of the island. Sir Thomas Lowe at once gave orders, a long boat put to sea, and a few hours afterward fragments were brought back which I had calcined for me. I now had plaster, I molded the face, and I proceeded with the autopsy." The above passage is Antommarchi's own personal claim to the mask-making.

Amongst family private papers in possession of Mrs. Burton after the death of her husband, October 24, 1828, was correspondence between Antommarchi and Dr. Francis Burton, Surgeon 66th Regiment, in which Antommarchi acknowledged that Burton had made the plaster and taken the mold.

Resorting to original sources of information to gain the facts in connection with the making of the death mask of Napoleon about which there is so much controversy, G. L. deSt. M. Watson, of London, has been able to reconstruct the episode of the mask and its aftermath which seems to be accurate and reliable.

The story condensed is as follows: On the day of Napoleon's death, there is talk both on the English and French side of making a cast of the face and head, and plaster is needed. On the following day, Antommarchi tries and fails in the attempt with such material as he had to work with. Dr. Francis Burton, however, succeeded in making a mold with some inferior plaster which he secured and on the next morning, on the arrival of better and fresher plaster, he takes his solitary cast and destroys the mold in so doing. From this cast, all the death masks of Napoleon originate. Burton left the cast to dry and on his return he finds that the front or "face part" has been seized and packed up by the Count and Countess Bertrand, and all efforts to recover his cast prove futile. On May 27, the Bertrands sail with their treasure for England. On June 13, 1821, Dr. Burton leaves with the "back part" of his cast, the occipital region, or just one third of the total skull. They all reach London in August and Dr. Burton tries to reclaim the "face part" legally. The suit came up in Bow Street Court, but Burton loses on some technicality and the Bertrands retain the cast and take it to France.

In the summer of 1822, when Dr. Antommarchi is their guest, they produce the cast and Dr. Antommarchi is allowed to make a secondary or piece mold of it. From this he takes a second cast and for nearly eight years nothing is done about it.

After Dr. Burton's death, the cast is brought to light and is palmed off as the original cast taken from the waste-mold, the fashioning of which he by this time publicly proclaims to have made, and from it is produced the 1833-34 edition of plaster and bronze masks. Meanwhile, the original cast, after doing duty as a reproduction medium, is put away and treasured by the Bertrands. From the daughter, it passed to Prince Victor Napoleon as a priceless treasure.

The right to the reproduction of the cast was placed in the hands of a French private syndicate and the firm of L. Richard et Quesnel, of Paris, was employed to make the casts of which fourteen are to be found in museums and private collections.

Phrenologists disputed the statement of Antommarchi that it was the authentic cast of Napoleon's face and head, as the skull lacked the "bumps" and distinguishing features requisite for such a "hero." Others were of the opinion that it was the face of the First Consul and not that of the aged Emperor. To vouch for its genuineness, a medallion struck off by the French mint under the sanction of Louis Philippe, the Citizen King of France in 1833, was attached to each bronze mask. This medallion shows a bas-relief portrait of Napoleon, crowned with laurels and with the lettering: "Napoleon, Empereur et Roi." Thus Antommarchi was able to overcome any opposition. To set it off properly, the head rests on a pillow of bronze and on this pillow appears the inscription, "A la ville de la Nouvelle Orleans par F. Antommarchi, 1834" on the mask which is in the Cabildo.

Antommarchi brought with him one of the bronzes when he came to New Orleans. A few days after his arrival, he wrote a letter to Dennis Prieur, Mayor of New Orleans, couched in the following terms:

New Orleans, November 12, 1834.

To the Mayor of New Orleans.

Mr. Mayor:

Profoundly impressed by the generous sentiments and keenly feeling the noble welcome with which the people of Louisiana have honored me, I have the honor of offering to this city the mask of the Emperor Napoleon, in bronze, molded by me at St. Helena after his death, and its bronze cushion.

I am happy to be the recipient of this homage intended to perpetuate the memory of the greatest man of all ages, among this free people, at the same time linking my great devotion to the grand and glorious souvenirs which this illustrious and majestic head recalls to the brave people of Louisiana, as well as to the universe.

While awaiting your orders concerning this, Mr. Mayor, I have the honor to be with high consideration.

F. Antommarchi.

Fig. 4. Death mask of Napoleon Bonaparte on bronze cushion, in Louisiana State Museum. Original bronze was presented to City of New Orleans by Dr. F. Antommarchi, November 23, 1834, with signature of Antommarchi and medallion of the French Mint.

Receiving a favorable reply, arrangements were immediately made for the formal presentation of the mask to the city.

The ceremonies were preceded by a parade of the brave men of the Louisiana Legion and the members of the French societies, with their banners and bands of music. The procession stopped in front of the Cabildo, the multitude went to the court room, and there the relic was presented with speechmaking, cheers, and great enthusiasm on Sunday, November 23, 1834. It remained in the Cabildo until the new City Hall was built by Gallier at Lafayette Square in 1850, when it was taken there and displayed. It disappeared during the war between the States and not until 1909, during Martin Behrman's administration, was it recovered. Now it is exhibited in a place of honor in the Sala Capitular in the Cabildo, the identical room in which it was so ostentatiously presented to the city in 1834.

To Louisianians, Dr. Antommarchi will ever remain an interesting character, particularly in connection with his rare and valuable gift to the city of New Orleans of the bronze replica of the death mask of Napoleon.

Much remains to be told of his eventful life, but documentary evidence is lacking in

this country so far as we have been able to find.

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NEW ORLEANS
Medical and Surgical Journal

Established 1844

Published by the Louisiana State Medical Society under the jurisdiction of the following named Journal Committee:

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SUBSCRIPTION TERMS: $3.00 per year in advance, postage paid, for the United States; $3.50 per year for all foreign countries belonging to the Postal Union.

News material for publication should be received not later than the twentieth of the month preceding publication. Orders for reprints must be sent in duplicate when returning galley proof.

THE JOURNAL *does not hold itself responsible for statements made by any contributor.*

Manuscripts should be addressed to the Editor, 1430 Tulane Avenue, New Orleans, La.

THE NEW OFFICERS

It has already been announced in the Journal that Dr. King Rand was selected as President-elect of the State Society for the coming year. The other officers who were elected, or re-elected, have not been commented upon because the Journal had to go to press.

In the selection of Dr. Rand, the Medical Society has made an excellent choice. Dr. Rand has been active in advancing the purposes of organized medicine and as Speaker of the House of Delegates he has been impartial and just in his rulings. He is an active and successful practitioner of medicine, and is well known to the laity. Dr. Rand may have to face many difficulties when he becomes president. Changing times and the war make for unsettlement in everything. The Society will be fortunate in having such a man as president who will guide with a strong hand and with excellent judgment.

The other newly elected officers included as first vice-president, Dr. H. Ashton Thomas, who conducted so successfully the recent meeting of the Society in New Orleans; as second vice-president, the extremely popular Dr. J. J. Murphy was unanimously chosen. Dr. Dawson T. Martin, Donaldsonville, was elected third vice-president, a well merited honor. We are very glad that Dr. P. T. Talbot, in recognition of his excellent services to the Society, was again selected for a two year term as secretary-treasurer. The councilors for the first, second, and fourth districts were all re-elected. To succeed the late Dr. J. B. Vaughan as Councilor of the Fifth District, Dr. W. A. Rodgers was selected. Dr. Rodgers is a Bastrop man and is very much liked by the members in the fifth district. He should make an excellent councilor.

Practically all of the standing committees were re-elected with a few exceptions. To succeed Dr. Cole, who moves up to the president's chair, a former President of the State Society and the now Secretary of the Louisiana State Board of Medical Examiners, Dr. Roy B. Harrison was chosen Chairman of the Committee on Public Policy and Legislation. Because of his familiarity with legislation and because of his keen mind and well liked personality, Dr. Harrison is an excellent choice for this important position. On the Committee on Hospitals Dr. L. B. Crawford and Dr. L. O. Clark are new members.

To succeed Dr. Seemann as Delegate to the American Medical Association, Dr. L. J. Menville was the popular choice of the

House of Delegates. Probably no man in the state has a wider acquaintance with medical men throughout the country than Dr. Menville. His sane and intelligent judgment will make him a valuable addition to the House which represents the medical profession in national affairs. Dr. George Wright, of Monroe, was named to succeed Dr. Vaughan as Alternate to the American Medical Association for 1940-41.

Dr. Val H. Fuchs, of New Orleans, will succeed Dr. Rand as Chairman of the House of Delegates. Dr. Fuchs is not only an excellent parliamentarian but is a man of excellent presence who should prove to be a splendid presiding officer of the House. As Dr. Fuch was promoted from the vice-chairmanship, it was necessary to elect a new vice-chairman, Dr. A. W. Martin, of Bogalusa, being named for this position. Dr. Martin's familiarity with the House of Delegates and with parliamentary procedures will make him an excellent substitute presiding officer.

To all these new officers and to the officers who were re-elected, the Journal offers its congratulations and best wishes. It bespeaks the cooperation of the members of the State Society in backing up these, their elected officers, in the performance of their respective duties.

CANCER CONTROL

Throughout the state there will be held in the last two weeks of June a series of graduate seminars having to do with the control of cancer. In addition to presenting to physicians the purely medical and scientific aspects of cancer, its diagnosis and its treatment, the man who will lead these seminars, will likewise appear before lay groups to publicize and inform the general public of the importance of the early diagnosis of this dreaded disease. Dr. Maurice V. Laing, of St. Louis, whose contributions to the study of cancer are well known, will conduct the several presentations. This should be a most interesting and stimulating short review of cancer.

The Cancer Committee of the State Medical Society is doing a good job in spreading knowledge concerning the disease which is responsible for so many deaths in people who have past the age of 40. It is absolutely necessary for the laity to be informed of the early symptoms of cancer so that they might consult their doctor immediately. It is only by spreading information concerning cancer that the general public will become cancer-conscious in order that they will realize and appreciate certain deviations from the normal should be investigated by a physician. Even if the laity is well informed, criticism has also been made of the physician because he is not sufficiently on the alert to detect the early expressions of malignancy. Many lay individuals have complained that they will go to a doctor and ask for a physical examination. The doctor will scoff at the necessity of such an examination and will not bother to make it. This is, of course, the exceptional doctor. The intelligent, progressive physician realizes that a yearly physical examination is an essential to the maintenance of good health and that often abnormalities will be discovered about which the patient was unaware. This applies particularly to some of the early expressions of malignancy. Cancer discovered early is curable and all measures should be taken to detect it early and to apply remedial measures immediately. In view of the present paucity of knowledge concerning the etiology of cancer and its life history, it will be only by instruction of the laity and by the careful, complete examination of the patient that the disease will be reduced in its incidence in the coming years.

HISTAMINE

Histamine is one of the important chemical compounds that has a pronounced pharmacologic and physiologic effect on the organism; yet, in spite of this, its value as a drug has been relatively restricted and, despite the great amount of experimental and clinical work that has been done with the preparation since it was first isolated from ergot in 1910 by Barger and Dale, its therapeutic use is still more or less experimental. The substance is widely

found throughout nature, being present in nearly all animal tissue. Probably the reason it is not commonly used is because it is so potent and has so many unfavorable bieffects.

The drug, if it can be called such, has a markedly stimulating action on the autonomic nervous center. It profoundly affects secretions so that it is often used for diagnostic reasons, for example in order to secure gastric secretion. On the cardiovascular system it exerts a most powerful effect. It acts as a dilator of the capillaries so that following a relatively large injection there occurs marked flushing of the face, flushing of the entire body at times, and tachycardia, while the cerebrospinal and intra-ocular pressures are increased, visual disturbances may occur and the blood pressure falls. The preparation is probably the most active stimulator of uterine muscle contraction that now exists. It constricts bronchioles as well. Large doses produce symptoms which are analogous to those which occur in shock; even at times it may cause the development of edema.

It seems quite remarkable that a substance, which in doses of not more than 1 milligram has such a powerful effect on the human body, cannot be used more frequently than it is in the treatment of various disturbances to which the human organism is susceptible. It has been found to be effective in the treatment of rheumatic infections, in many instances most satisfactorily. In various types of arthritis, if it is used as a local inunction it causes vasodilatation, particularly in the soft tissues and periarticular structures. This form of therapy is certainly one to bear in mind for use in the treatment of patients who have painful arthritides. It is found useful in brachial neuritis and other types of localized neuritis. It is said to be of considerable value in the management of peripheral vascular diseases to produce dilatation of the arterioles and capillaries. In this journal some years ago Thiberge[1] reported on its use in the treatment of asthma. At that time he wrote that more work should be done with histamine to determine whether or not it is a non-specific disensitizer in allergic cases. The drug has also been used in other allergic conditions. It is said to help sometimes in the management of chronic intractible urticaria and from the Mayo Clinic, Roth and Rynearson[2] have found the use of histamine and histaminase valuable in controlling insulin skin reactions which occasionally are annoying and disturbing. It is used also in cold allergy.

One of the most annoying and unsatisfactory conditions to treat is migraine. Also from the Mayo Clinic comes a report[3] of the treatment of headaches which resemble somewhat those of migraine which have come on in later life. Others have found this satisfactory in treating true migraine but utilized with caution. Sometimes histamine has been used successfully in the treatment of tobacco amblyopia.

Most of the conditions which have been enumerated are those to which any form of therapy is likely to be unsatisfactory. Perhaps when the physician has come to the end of his therapeutic armamentarium he may get results with histamine in these conditions, but not forgetting that in arthritis and periarthritis and other local inflammatory conditions of the locomotor system, histamine has definitely proved of value.

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HOSPITAL STAFF TRANSACTIONS AND CLINICAL MEETINGS

TOURO INFIRMARY
New Orleans

A regular meeting of the Medical Staff was held on Wednesday, May 8, at 8 p. m. The following program was presented: Clinico-pathologic Conference by Dr. John A. Lanford; "Cardiac Rupture" by Dr. B. R. Heninger; "Aplastic Anemia Following Neoarsphenamine" by Drs. C. L. Eshleman and Roy O. Yeatts; "New and Modern Anesthesias" courtesy of Winthrop Chemical Company, Inc.

MERCY HOSPITAL—SONIAT MEMORIAL
New Orleans

The monthly meeting of the Medical Staff of Mercy Hospital was held on Wednesday, May 1, 1940, at 8:00 p. m. in the Lecture Room of the Hospital. Dr. R. A. Oriol, president of the staff, presided.

A symposium on carcinoma was held, during which the following papers were presented: "Surgical Treatment of Carcinoma of the Breast" by Dr. P. A. Phillips. "The Early Diagnosis and Surgical Treatment of Gastric Carcinoma" by Dr. L. J. Hanckes; and "Carcinoma of the Rectum" by Dr. Warren Hébert.

Following the symposium, an interesting case of laryngeal diphtheria, taken from the mortality records of the month, was presented by Dr. J. A. Vella.

P. A. Phillips, M. D., Sec.

LONG HOSPITAL
Pineville

At the weekly staff meetings of the Huey P. Long Hospital, held under the supervision of Dr. O. W. McFarland, superintendent, and Dr. John C. Connell, pathologist, the following cases were presented during the month of April.

1. A case of a colored female who had been operated on for a large uterine tumor five months before her admission and had also received deep x-ray therapy. One month prior to admission she developed shortness of breath and weakness. A clinical diagnosis of myosarcoma with metastasis was made and this was confirmed by autopsy findings.

2. A case of a male negro admitted to the hospital with marked swelling of the abdomen. Examination revealed marked tenderness of the abdomen, ascites and enlarged liver. A large firm mass was palpable in the right lower quadrant. A clinical diagnosis was made of cirrhosis of the liver, intra-abominal tumor and ascites. At autopsy the mass proved to be an appendiceal abscess with phlebitis leading to the liver with multiple liver and lung abscesses.

3. A case of a young colored male admitted to the hospital with symptoms and findings of an acute appendicitis; an appendectomy was done. Five days postoperatively the patient developed pains in the ankles and right wrist with elevation of temperature. Prior to admission the patient had had acute tonsillitis. With the above findings of acute tonsillitis, fever, pain in joints and abdomen, a diagnosis of rheumatic fever was made. The diagnosis was proved by microscopic examination of the appendix.

4. A case of a young white female who was pregnant for the first time; however, the size of her uterus was not compatible with her history of amenorrhea. Due to the presence of vaginal bleeding and inconsistency in the size of the abdomen a diagnosis of hydatidform mole was made. This mole was passed while in the hospital. Three weeks later she was readmitted with distention of the abdomen and a large mass about the size of a six months pregnancy was palpated. At operation two large multilocular cystic ovaries were noted and removed; a hysterectomy also being performed. A microscopic section was taken from a suspicious area of the fundus which presented some softening with invasion. This was finally reported as an early chorio-epithelioma of the uterus. Microscopic section of the ovaries revealed large corpus luteal cysts.

5. A case of a young negro admitted to the hospital with signs and symptoms of acute cardiac decompensation and presenting a picture of possible peptic ulcer due to the rigidity present in the upper abdomen, but due to the history of syphilis it was thought possible that this may have been a syphilitic process. The patient was treated for acute decompensation but the epigastric pain failed to subside. He expired suddenly on the ninth day after admission and autopsy examination revealed approximately 1000 c.c. of blood in the pericardial sac and there was also noted a dissecting aneurysm of the aorta. The dissection started from the distal part of the aorta at the level of the iliac vessels and extended upward to the pericardiac sac. Multiple infarcts of both kidneys and lungs were also present. Small ulcers were noted in the pylorus.

6. A case of a white female admitted with the chief complaint of diarrhea for one year, swelling of the abdomen, feet and ankles, giving a past history of a massive gastric hemorrhage four years ago. A clinical diagnosis was made of cirrhosis of of the liver, and possible carcinoma with metastasis. The patient was treated in the usual manner but expired ten days after admission. Two days prior to her death she began vomiting blood. Autopsy examination revealed massive blood throughout the gastrointestinal tract with extensive varices of the esophagus, perforated appendix with peritonitis, ulcerative gastritis, enlarged spleen and cirrhosis of the liver.

7. A case of a colored female admitted to the hospital with physical findings of tenderness in the right side with tumor mass. The uterus was fixed and pushed anteriorly towards the right and bogginess was felt in the cul-de-sac. A diagnosis of pelvic inflammatory disease and cul-de-sac abscess was made. She expired ten hours after admission. Autopsy findings were those of a pelvic abscess which ruptured into the perineal cavity producing peritonitis.

All of the above cases were discussed both pathologically and clinically with analysis of their treatment.

A brief report of some of the interesting topics presented at the medical convention in Arkansas was given by Dr. John C. Connell.

Anthony Failla, M. D., Sec.

GRADUATE SCHOOL OF MEDICINE LOUISIANA STATE UNIVERSITY MEDICAL CENTER

New Orleans

The scientific meeting of May was called to order by Dr. James T. Nix, Dean of the Graduate School of Medicine. Dr. Bjarne Pearson presented the following paper:

A CONSIDERATION OF RETOTHELIOSARCOMA OF BONE

Occasionally one sees certain tumors of bone of non-osseous origin which resemble endothelial myelomas on the one hand and reticulum cell sarcoma on the other. Because the osseous manifestations of these tumors at times seem clinically and pathologically to occupy the foreground, even though the histology and course are at variance with Ewing's tumor, they are classed with this group. If a localized group of lymph nodes is involved primarily with secondary dissemination, including bone in the course of a reticulum cell sarcoma, there is no hesitancy to assign it to the proper group. As many of these patients are in an older age group than Ewing's tumor the possibility of confusion with metastasis from true hypernephromas from the adrenals or kidney and liposarcoma of bone becomes apparent. Ewing[1] accepts liposarcoma of bone as an entity and classifies it as such in the bone tumor registry. He apparently also accepts lymphosarcoma of bone. The cases under consideration would probably fall in this group.

Endothelioma of bone: It was already known that certain vascular bone tumors could exist as already pointed out by Bilroth, 1869,[2] and Kalaczek in 1878.[2] It is possible that many cases in the older literature represented forms of osteogenic sarcomas and even metastatic tumors. One of the most remarkable cases of this nature was that of Marckwald in 1895 who reported a multiple intravascular endothelioma in all the bones of the skeleton. Ewing has felt that this might be designated as a true endothelioma of vascular origin

It is the diffuse endothelioma of bone which has been referred to as Ewing's tumor. The clinical, anatomic and pathologic features of this tumor set it rather distinctly apart from other tumors of the bone. Although Ewing states that these tumors have an endothelial origin, he has found it difficult to trace the tumor to these cells. However, he has seen in early lesions small groups of cells arranged perivascularly and a variation in the same tumor in which there were angioendotheliomatous and peritheliomatous structure and also diffuse growths. Kolodney,[4] in reviewing the same sections of Ewing's material, commented on the perivascular arrangement which he thought could be present in any rapidly growing tumor. He mentions that the resemblance of this tumor to the lymphogenous diseases is very striking. Oberling[5] believes these tumors should be classified as reticulum cell sarcomas. Melnick,[6] in 1933, believed these tumors do not belong to the reticulo cell sarcomas as they do not exhibit phagocytic activity.

Features of Ewing's tumor: Accumulative evidence has fairly well shown that Ewing's tumor or the diffuse endothelioma of bone is a fairly definite group of tumors. In a series of 125 cases, Geschickter[7] found that 95 per cent of his cases occurred between the ages of 4½ and 25 years, with 50 per cent of the cases from the eleventh to the twentieth year. In most cases intermittent pain was present and as time went on the free interval became shorter. Tumor could be palpated initially in 19 per cent and during the course of the disease tumor was present in 90 per cent of the cases. The average duration before the treatment was 10 months. Pathologic fracture was rare in this series, occurring in only 5 per cent.

Fever is a rather constant feature ranging from 99 to 104°. Early it is found in 30 per cent of the cases, when dissemination and metastasis occur the fever becomes more constant.

The bones most frequently involved are the femur and tibia, next in frequency one sees the jaw, humerus, pelvis and fibula. Grossly a large extent of the shaft is involved. The epiphysis is rarely invaded, this being invaded in only three of Geschickter's 125 cases. From gross and microscopic studies it seems that the tumor arises subperiosteally. At least from gross inspection after amputation one sees most of the tumor subperiosteally, the medullary cavity contains only a small portion of the tumor but as this region is partially or totally occluded by new reactive bone it does not indicate that the main portion began as a subperiosteal tumor. Due to the growth of the tumor plus hemorrhage there is a gradual separation of the periosteum from the underlying cortex and hence parallel proliferation of new bone is formed which is distinguished early radiographically by the "onion peel" appearance. Erosion of

bone occurs by tumor infiltration and extends a considerable distance of the whole shaft. The soft part of the tumor is usually encapsulated by a layer of fibrous tissue and is separated by connective tissue strands extending from the outer capsule to the cortical bone.

The microscopic features of the disease are very uniform and are composed of small, round, coherent, closely packed cells. The nuclear diameter is from 7-9 microns. Very little pleomorphism is observed either in the original lesion or its metastasis.

In some cases the vascularity may be marked as to form areas resembling angiosarcoma, and tumor is usually present in the Haversian canals, whose blood vessels may be invaded by tumor tissue. It is this fact, together with the closely packed coherent "endothelial" like cells both in the original and metastasis, that has suggested this tumor is of endothelial origin.

In every case where the tumor progresses to a lethal outcome metastasis has been present. The most frequent sites are lungs, skull and lymph nodes. A definite latent period between the appearance of the original lesion and the onset of osseous metastasis was present in Geschickter's series ranging from two and a half months to one year. The most frequent metastatic bone lesions were located in the skull, spine, rib, scapula and clavicle.

Reticulum cell sarcoma with bone involvement: Ewing accepts lymphosarcoma of bone and refers to Craver and Copeland's[8] contribution of 164 cases in which the diagnosis of lymphosarcoma was established by biopsy or autopsy. Seventeen or 10.4 per cent were found to have bone involvement. Most of these patients died before the third year of the disease. The bones involved were the spine, pelvis, skull, femur, humerus, tibia, scapula, mandible, fibula and ribs. Pathologic fracture occurred five times. In the long bones the medullary cavity was involved extensively and osteolysis was the most frequent picture. The tumor infiltrates through the Haversian canals and extends beneath the periosteum. Usually there is no new bone formation. The histology in most of these was that of a small cell type of lymphosarcoma.

As early as 1914 Ewing had separated from this group of lymphoid tumor a large cell type which he states arises from the reticulum. In 1930 Roulet[9, 10] described in more detail these reticulum cell sarcomas and called them retotheliosarcoma. He divides them into three groups:

1. Immature, in which the tumor is built up of a uniform syncytium with large pale polygonal cells.

2. Mature forms which are characterized by the tumor to form fine fibrils which arise within the plasma. In the early stages the fibrils are only apparent with silver staining, but later they assume a collagenous character.

3. Associated or combined forms in which the process is combined with pathologic proliferation such as leukemia or lymphogranulomatosis. This is in conformity with Oberling who describes Ewing's tumor as a retotheliosarcoma localized to the bone marrow. What lends support to this contention are atypical bone tumors which conform in some respects to Ewing's tumor but have the morphologic criteria of reticulum cell sarcomas. Geschickter refers to these as atypical Ewing's sarcoma. These have a rapid clinical course and resemble acute osteomyelitis, and all with a fatal outcome. The two cases we are about to report are of this type. In one the diagnosis of reticulum cell sarcoma of bone was suggested when secondary metastasis occurred in the spine; later biopsy of the axillary nodes established the diagnosis of reticulum cell sarcoma. The second case, the original biopsy which was taken from an abdominal mass was in conformity with Ewing's sarcoma. Autopsy showed reticulum cell sarcoma.

CASE No. 1

Patient was a white male, 39 years of age, who was first seen at the Tumor Clinic on November 16, 1937, complaining of a mass in the right ileum since October, 1937, with pain in this region especially when walking. Because of this the patient resorted to a cane. On examination the mass in the region of the right ileum could be seen and felt posteriorly. It was a rather soft, indefinite mass, measuring 15 x 20 cm.

X-ray examination on November 3, 1937, revealed what was considered to be a periosteal sarcoma of the right ileum.

From November 18, 1937 to February 2, 1938, he received a total of 3990 R to right ileum. The tumor diminished rapidly in size and at the end of the treatment on February 2, no mass could be discerned and he was able to walk without the assistance of a cane.

Because he complained of some pain in the chest in the region of the sixth to eighth dorsal, x-ray was taken on January 18, 1938, which showed metastasis to the posterior arc of the left eighth rib and to the body and transverse process of the sixth dorsal vertebra. There was no metastasis to the lungs or mediastinum. The white count at this time was 6150 with a hemoglobin of 69 per cent and normal differential count. A tumor mass could be felt in the region of the eighth dorsal vertebra at this time, measuring 6 x 7 cm. From January 19, 1938 to January 28, 1938, a total of 1320 R was given over this area with complete regression of the tumor mass. It was felt at this time because of the metastasis to bone, the marked radiosensitivity of the lesion, and the age of the patient, an atypical Ewing's tumor or a reticulum cell sarcoma of bone must be considered. There was no evidence in this case of a primary lesion with metastasis to bone.

He was able to work and felt well until June 2, 1938, when he again noted pain the right hip and bilateral enlargement of the axillary nodes. These had been present for about 10 days and were 3-4 cm. in diameter, soft and freely movable. Biopsy done at this time of the axillary nodes showed a reticulum cell sarcoma.

In spite of additional x-ray treatment he went rapidly downhill and died on November 10, 1938.

CASE No. 2

The patient was a white male, 41 years of age, who was first seen when admitted to Charity Hospital on November 28, 1939, complaining of a swelling of the right leg since August, 1939. Two weeks afterwards he noted that lumps appeared near the umbilicus. A month before he came in, he began to have night sweats, chills and fever.

Examination revealed enlarged nodes in both inguinal regions and masses around the umbilicus. On the anterolateral aspect of the right leg there was a swelling extending three fourths of the length of the thigh. It was hot and tender and suggested acute osteomyelitis. Hemoglobin was 68 per cent and differential count was normal. Biopsy of the abdominal nodes gave a histologic picture compatible with endothelioma of bone. X-ray pictures were also compatible with Ewing's tumor of bone.

The patient died on January 12, 1940. Autopsy showed a tumor of the right femur with metastasis to the hilar lymph nodes, pancreas, both adrenals, abdominal wall and inguinal lymph nodes.

COMMENT

In a broad sense these two cases probably fall into the group of Ewing's tumor. The age of the patient does not necessarily exclude this tumor. In the first case the morphologic appearance of the excised node was definitely that of a reticulum cell sarcoma. In the second case, sections from the abdominal mass had the morphology of an endothelioma. However, the metastatic lesions as well as the primary lesion at autopsy revealed microscopically a rather marked degree of pleomorphism, with large cells containing bizarre, large, hyperchromatic nuclei. Some of the cells suggested the phagocytic activity of the reticulum cells because their cytoplasm contained a large number of polymorphonuclear cells.

Aside from the purely morphologic aspect of these tumors, it seems that those that have been described typically as belonging to the Ewing group have a longer, more protracted course. The average postoperative duration of life in the fatal cases is 16 months and the average duration before treatment is 10 months in Geschickter's series. Combined surgery and radiation gives about 10 per cent permanent cures.

If one is permitted to speak empirically from our own experience with reticulum cell sarcoma as occurring elsewhere in the body, we note that it is among the most radiosensitive of all tumors. So quickly and completely does the original focus of the tumor disappear, very often to small amounts of radiation, that one begins to harbor a false sense of security as to its eventual curability. It has been our experience in following up these cases that even in the face of a most remarkable initial, apparently complete response, they live a year or less. This is true of reticulum cell sarcomas probably because of their tendency to generalize early. This has not been our experience alone, but is also reflected in the experience of Edling,[11] Gunsett,[12] Eigler and Kock.[13]

There are undoubtedly variations in the degree of malignancy in the group and studies similar to Roulet, Oberling, and Ahlstrom,[14] in attempting to separate these tumors on the basis of reticulum stains may be of value in the evaluation relative to the malignancy and future course and prognosis of this disease. Attempts of a similar nature are being made here at the present time. A plea is made for a more conscientious effort in evaluating these patients whether the manifestations are mainly osseous or non-osseous, and especially should they be followed up at more frequent intervals in spite of a remarkable initial repsonse.

CONCLUSIONS

1. The endothelial origin of Ewing's tumor is difficult to demonstrate.

2. Atypical cases of Ewing's tumor have definite similarity to tumors of the reticulo-endothelial system and support this idea of their origin.

3. Because of the work of Roulet and Oberling a growing conviction of the reticulo-endothelial origin of these tumors has become more and more apparent. The name suggested has been that of retotheliosarcoma.

4. In the atypical and older group one has to exclude metastatic tumors from the adrenal and kidney and also liposarcoma of bone, because of the similarity in morphologic appearance.

5. Two cases which could fall into the class of retotheliosarcoma of bone have been described.

6. The initial therapeutic response should not give a false sense of security because the course of the disease is seldom longer than one year. A plea is made for a more critical evaluation of this group.

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HUTCHINSON MEMORIAL CLINIC OF THE SCHOOL OF MEDICINE THE TULANE UNIVERSITY OF LOUISIANA

New Orleans

Scientific Session conducted by the Department of Social Service, Mrs. Julia Mae Magruder, presiding.

Hyperthyroidism Complicated by a Social Problem (Dr. Ambrose H. Storck): The case of Mrs. R., who was recently under active treatment in the Hutchinson Memorial Clinic for hyperthyroidism, particularly well illustrates the importance of the adjustment of social problems and the necessity of considering these factors in connection with medical care in some instances at least in cooperation with the Social Service Department.

Mrs. R. presented herself to the Surgical Clinic first on March 4, 1940. At the time I was asked to see her with the student who had first gone over the case. She was sitting on the edge of a chair with a child no older than about one and one-half years. She was obviously ill at ease; had the agitated facies of an individual with hyperthyroidism; and, in giving the history, it was first of all revealed that she was in the clinic in spite of the objections of her husband who was generally opposed to clinics and doctors and felt that she ought to be at home. She had left the several other children at home under the father's care, he being a W. P. A. worker and, not having been employed in several years, apparently devoted himself to fathering several children.

Going into the history in brief, Mrs. R. presented a complete picture of hyperthyroidism. Her basal metabolic rate was plus 62. She had a tremor. There was a history of weight loss. The problem of inadequate food supply arose in the course of the investigation that we carried on.

She was obviously in need of immediate hospitalization. When the matter of hospitalization was discussed with her, she felt that it was going to be entirely out of the question. She saw no solution and no way out for herself and felt that on account of her husband's attitude and their very poor financial condition, she just could not leave the house and her children to the care of her husband.

The whole picture immediately presented itself as one that illustrated the need for help by a social worker. It occurred to me and was apparent to the student that before we could even make the first move toward starting operative treatment, help from the Social Service Department would have to be enlisted. That was done and Mrs. Magruder will tell you later what steps were taken to make it possible for this patient to go into Touro Infirmary.

It was possible, through the Social Service Department, to have Mrs. R. admitted to Touro Infirmary. After admission to the hospital, she quieted down, responded well to treatment, and a bilateral subtotal thyroidectomy was performed. She had an uneventful recovery and returned to her home. Those are the essential points from the surgical point of view.

Social Service—A Component in Medical Care (Julia Mae Magruder): Social service in the medical institution was originated by physicians who were conscious that the needs of a large number of patients were not being met in clinics and hospitals because of the necessity of treating large numbers of people apart from their natural setting. The disease was treated but in many instances little or nothing was known of the person who had the disease, his environment, family relationships, hopes and fears. Often facts important in diagnosis were unknown. Gradually through the years has developed this service which fills the gap and is an extension of medical care. To be effective, it must be an integral part of medical care, not an unrelated service. It is an adaptation of social case work technics based on knowledge and skill acquired through training and experience. The social worker must have an understanding of human behavior and social environment, skill in interviewing and the ability to mobilize the social resources of the community in order to increase the effectiveness of diagnosis and treatment. The purpose of social service is to provide an understanding of the individual and his problems in the way best suited to the needs of that individual.

Social work encompasses many activities but is thought of most frequently as relief giving. It is thought by many that, given the means of subsistence, the other social problems will solve themselves. One of the reasons for this is that the individual so often expresses his problem in terms of money. It is tangible, easily expressed and in clinics where so many have limited means, it may be said to be applicable to the majority of patients. The patient who cannot accept the idea of taking insulin because of fear, a feeling of revulsion or lack of understanding finds it easier to say he cannot afford it. To deal adequately with the situa-

tion, the individual and his problems must be understood and the problem approached in terms of the patient as a person. Financial assistance is only a small part of the medical social problem, although it looms large sometimes because of the lack of resources.

The primary function of the Social Service Department of the Hutchinson Memorial Clinic is case work adapted to the problems of ill health. In the main these problems are related to inadequate physical or economic protection, faulty personal habits, dissatisfactions within the personal life and relationships and lack of understanding of medical needs. Each case of social maladjustment presents one or more of these factors in varying combinations and each requires highly individual treatment. Each case must be studied and the problems met through conscious and coordinated planning. It is a painstaking process requiring continuity and sometimes covers a period of months or years. Much has gone into the making of the human being who presents himself for medical care and no two are exactly alike. The simple telling of the patient what to do often does not mean that it will be done. Environmental changes must be made, relationships adjusted and attitudes modified. The planning for the patient must be related to the family, work and educational situation to achieve satisfactory results. When several members of the family are under medical care the plan must be adjusted so that the needs of each are met. The individual cannot be isolated from his family and one member of the family cannot be given special consideration at the expense of the others without destructive results.

Cooperation with social agencies is necessary for coordinated planning and to avoid duplication. They need us and we need them. They provide services and material assistance that the medical agency could not begin to supply and they need to have an intelligent understanding of the medical problems and needs of their clients in order to plan constructively with the families with whom they are working. Often through their intimate knowledge of the family they can provide information that will give us insight into the medical social problem that we can get in no other way.

It is impossible for the busy doctor, in addition to his already heavy responsibilities, to carry out the detail of social services. And yet the neglect of the social factors in the medical problem results too often in incomplete or futile treatment. In delegating the detail of social study and adjustment to the social worker, the doctor does not and should not give up any part of his real responsibility for the patient. The purpose of social service is not to relieve the doctor of responsibility but to make it possible for him to meet that responsibility more effectively.

The Hutchinson Memorial Clinic as a teaching clinic, has as its objective the teaching of medical practice, not simply theoretic medicine. In this setting, social service is a part of the teaching process. In teaching the social component of medicine, the purpose is not to make a social worker of the medical student but to give him an understanding of the relation between the social and medical problems. He must understand the cause and effect relationship between medical and social problems. He will face these problems in medical practice and, in many instances, will have to assume some responsibility in solving them. Just as the practice of medicine cannot be taught without the examination and treatment of actual patients, social problems in medicine have no reality for the student unless he sees social case work clearly and fully demonstrated. Theoretic discussion of social problems and their solution is unconvincing unless it is supported by demonstration in the care of the patient. Disregard of the social factors related to illness implies to the student that they are not a part of the medical problems and he therefore considers them as no part of his responsibility. Unless the social component in medicine is instilled into the student throughout his medical course, an awareness of it usually is not developed short of years of practice and in some it never becomes a part of the thinking. Social case work involves a flexible and intangible process that is difficult for the student to grasp through any means except demonstration. And grasp it he must if he is to adapt the method in his practice.

The case presented by Dr. Storck illustrates the variety of social problems that may complicate the medical care of the patient. Mrs. R. had five children. The baby, who was two months old, was breast fed and two of her other children were under the age of three years. The family was on relief because the husband was incapacitated for work due to a hernia. Mrs. R. exhibited a great deal of fear of her husband who "did not believe in doctors and did not think she was sick anyway." The baby had to be weaned within a week, arrangements had to be made for the housekeeping and the care of the children and the cooperation of the husband had to be obtained. It meant immediate admission of the baby to the clinic for feeding instructions; visiting nursing service to teach and supervise the preparation of the formula and to instruct the patient in the care of her breasts; obtaining housekeeping service through the W.P.A.; and interpretation to the husband as well as the patient. The real problem here was the husband; the other things were relatively simple. The patient appeared to fear her husband more than she did the operation. She was afraid of what he would say when she reached home because she had had to remain over for the afternoon clinic to have the baby seen and had not been at home to prepare the mid-day meal. Unquestionably Mr. R. presents a problem that can be

handled only by a psychiatrist, though it may be too late for psychotherapy to be effective since he is considerably older than his wife. In any case, our patient needed immediate care; we could not wait for the husband to receive psychiatric treatment. The husband had to be met at his own level then, in a way that he could understand and accept. We knew very little about him but he was approached in the light of a knowledge of fundamental behavior patterns. In spite of what the patient had expected, he responded readily, gave his consent for the operation and came in the following day to see the doctor as he had been requested. The patient was admitted to the hospital at the scheduled time. The patient was relatively undisturbed as hospital admission approached, in contrast to her feverish excitement and anxiety of the previous week. How much of the change in the patient was due to physical improvement, Dr. Storck would be able to tell you. Here we have a patient in whom there is an accurate diagnosis and a clear-cut treatment plan. And yet without recognition and adjustment of the complicating social factors, it might have been just another record with that classic ending, "Patient failed to return."

Medical Social Case Work Practice—Case Illustrations (Helen Koft): Medical social workers accept the thesis that impairment of physical function is traced to organic disease, physical deprivation and emotional dissatisfactions. Treatment of of the patient or adjustments must be made in all three areas. The physician prevails in matters of health, and social worker in matters of social causes and consequences. When the three causes are interrelated frequently the complexity of treatment increases and necessitates the cooperation between physician and medical social worker.

To demonstrate the cooperation and to emphasize the services a medical social worker may give, the following situations selected from our case records are presented:

Mrs. M., a 22 year old, white woman, and her two year old child were referred by the doctor to the Social Service Department to plan for nursery care for the child. Mrs. M. was anemic and underweight. A special diet and afternoon rest were recommended for her. She thought the child made it impossible for her to rest and this was undoubtedly true but she was also the victim of poor household management and domestic confusion.

The medical social worker made it possible for her to secure consultation service regarding child care and discipline and budgeting from the local family agency. She was given the opportunity of discussing her problems with a skilled person capable of helping her through a difficult period in her early marriage.

Had the baby been temporarily removed and nothing done for the mother, the contributing problem, namely, the mother's inability to manage her child and her home, would have remained unsolved and the disability might have continued.

The effect of environment on disease has been universally accepted. Dr. G. Canby Robinson, of Johns Hopkins, in a recent study of 174 unselected patients receiving medical care, found that 124 or 71 per cent could not have been adequately treated without considering their social conditions. He found that without an appreciation of the underlying social causes of psychogenic symptoms, treatment too often began and ended with ineffectual reassurance or with sedative drugs.

In our clinic this point is illustrated by the case of a nine year old boy who was referred to social service in August, 1939. He had been treated at the clinic intermittently for three years for gastric disorders, flat feet, colds and nervousness. The medical social worker visited the home and studied the situation. It revealed that the boy was the only child of an alcoholic father and an overly-protective mother. The parents were incompatible and admitted frequent quarreling at meal time. Eventually it appeared that the loss of the child's appetite, his erratic food habits and general lethargy were due to the family problems. The mother's temper tantrums in the presence of the child and her criticisms of the father's behavior seemed to be responsible for the child's emotional conflicts which had so influenced his physical health. Fortunately the parents were able to understand this; the father left home temporarily while he received treatment at the Veterans' Hospital and during his absence the mother learned to modify her relationship with him for the good of the child.

Physicians are well aware of the fear which exists for the patient who has had or thinks he has had unsatisfactory medical treatment in the past.

Resistance to further medical care can often be met with careful interpretation and sympathetic appreciation of the patient's difficulty. For example, a 28 year old white woman reported to the Medical Clinic September, 1939, with complaints of soreness in both tibia and right hand. Following the diagnosis, antiluetic treatment was recommended. The patient was told a spinal puncture would be necessary. She did not return. Her failure to return to the clinic was reported to the Department of Preventive Medicine; a medical student was assigned to make a home visit with the medical social worker. They made a tentative plan of approach to the family. The family living on a marginal income appeared uninterested in renewing their contacts with the clinic and gave as reasons:

1. Two negative Wassermanns which they supposed made further treatment unnecessary.
2. The fear that a spinal puncture would affect her mental condition.
3. Inability to pay for the treatment.

4. Husband's objections to her visits to clinic.
5. Her lack of faith in treatment because she believed her original infection had been derived through blood transfusions administered without proper precaution at another hospital.

The student and the medical social worker met these objections in a discussion with the woman and later with the woman and her husband. The student explained that her most recent Wassermann was positive and that her ill health was caused by the persistence of the old infection. He also described the spinal puncture and she was given confidence by being told a practicing physician, and not a student, would make the test.

The medical social worker discussed their financial situation and the social consequences of the disease for her own family and for the community. The husband was seen and he agreed to the advisability of following the recommendations after he understood the situation.

Finally the patient's resistance was reduced to her strong feeling about the source of her infection. Together the student and the medical social worker helped her to accept her previous experience as something in the past which could not be changed and emphasized the probability of a good prognosis provided she resumed treatment.

The patient returned to the clinic, resuming her antiluetic treatment, and three months later she was willing to submit to a spinal puncture. Her confidence had been restored by the tolerant and sympathetic understanding of the doctor who was aware of her fears and resistance.

These cases by no means represent the full extent of the social component in medicine but illustrate to a degree at least, the variety of problems which are met in a teaching clinic such as this.

The Role of the Psychiatric Social Worker (Nirna E. Mead): Much of the material which has been presented by Mrs. Magruder is pertinent as well to the social problems encountered in psychiatric work and to the functioning of the psychiatric social worker. However, in work with patients who are mentally ill, intellectually handicapped, or emotionally inadequate, unstable or maladjusted, the social worker who supplements and complements the work of the physician finds herself confronted with some unique problems and therefore does function in certain areas in a special way.

In our work we find the too prevalent attitudes regarding mental illness a serious handicap. Shame, ignorance, superstition, and failure to recognize and understand psychosomatic relationships frequently prevent an individual from securing necessary and proper treatment. Interpretation with desensitization is therefore often the first essential.

The social worker may step into this gap. Her knowledge of mental illness and emotional disturbances, the signs, symptoms, and medico-social implications, may enable her to serve as an interpreter to patients, relatives, interested persons or agencies, of not only the illness and need for treatment but also of the services that are available and of the prerequisites for securing them.

After the need for treatment has been determined and plans for the securing of such treatment have been made, complications sometimes arise. An individual aware of his need for psychiatric treatment may seek such treatment without the knowledge of his family. If a treatment regimen is to be attempted, the understanding cooperation of the family is desirable if not indispensable. The social worker may be able to use her knowledge and skill to effect a favorable treatment situation. Conversely, a member of a family, with an awareness of the illness of another member who does not have insight into his own condition, yet may be seriously in need of treatment, may bring this problem to the social worker. Through careful planning and guidance, a treatment program may be instituted and trauma for all concerned kept at a minimum.

Giving assistance in regard to commitment may become a part of the social worker's function relative to treatment. Due to the legal concept of insanity and the fact that hospitalization of a mentally ill person is primarily a legal rather than medical procedure, this step is frequently difficult to take from both an emotional and technical point of view. Interpretation of the patient's need of hospitalization and its advisability for the patient as well as for the family and possibly the community, together with an explanation of hospital facilities and services, frequently helps a patient or his family to accept and seek hospitalization. Commitment procedure is then discussed and if need be, assistance is given in carrying it out. It is sometimes possible for us to help in effecting the actual hospitalization of a patient in a way less terrifying to an already disturbed patient and less distressing to the family than may be the case if it is handled routinely. If a patient's mind, in place of his lungs, heart, or appendix be diseased, we have the quaint custom of having him picked up by the sheriff or police and placed in jail or other hardly more desirable situation to await ultimate disposition.

In psychiatric work, a patient must be studied and treated as a person, a member of a family or primary group, and the community or secondary group. Diagnosis may be dependent upon the securing of a life history with subjective and objective interpretations. A treatment program must be formulated in terms of the assets and liabilities present in the life setting. The physician, if the patient is not too ill, will secure from him his story with his own subjective interpretation of it and of his illness.

This furnishes a starting point but much may remain to be discovered. The study of our patients seems to us to be the securing and fitting together of multitudinous pieces of an intricate picture puzzle. Gradually, little by little from this source, from that one, information is gleaned, factual data, attitudes, relationships, experiences, actions, and reactions, in the hope that eventually all necessary fragments will be had and the picture in its entirety be achieved.

What is the nature of this person? What were his racial and familial inheritances? Does he come of phlegmatic, sturdy stock or is he of highly emotional unstable stock? What was his intellectual endowment?

What has been the patient's nurture? What was the cultural pattern in which this personality developed; what the family constellation? Are his oddities in thinking and acting a product of a sick mind or a warped personality or rather the expressions of racial and familial prototype? The bank president who complains that a spell has been cast upon him presents a picture which varies from that of the backwoods negro who relates tales of spell-casting. What have been the stresses and strains, what the satisfactions and joys? Wherein lies weakness, wherein strength? What is the history of the patient's physical, mental and emotional development? What has been his behavior pattern? Are there threads which can be traced throughout to give diagnostic clues? Wherein is modification of situational factors, of attitudes possible? To what extent can accommodation and adjustment in the home and in the community be anticipated?

In an attempt to secure answers to these questions the social worker may come to the aid of the psychiatrist. Interviews with the patient and members of his family may bring answers to some of them. An objective evaluation of the home and community will bring others. Reports from institutions, schools, former employers and other social agencies may be secured. Such reports frequently enrich the study of a case and at times will even provide leads which may prevent or dissipate an impasse, diagnostic or therapeutic.

While a patient is under treatment in a clinic, interpretative work with the family and perhaps in the community may be a necessary part of the total treatment program with which the social worker may assist. Withdrawal of a patient from treatment against advice may be prevented through her efforts as well as returning a patient to convalesce in a situation in which the possibilities of continued improvement with satisfactory social adjustment and perhaps ultimate recovery are practically precluded.

Follow-up services are another area in which the social worker may function. Along with assisting with treatment and environmental manipulation and accommodation, she can watch for signs and symptoms of relapse or recurrence of an illness. The patient can then be returned to clinic or hospital care before all the gains theretofore made have been lost.

Since knowledge and consideration of the social factors involved is essential to diagnostic and treatment procedure, in our Clinic, we follow certain practices which are peculiar to our particular set-up.

The physician-social worker relationship is closely knit. All patients who are admitted to the psychiatric clinic for work-up and treatment automatically become part of the social worker's case load without written referrals. Social service is recorded in the chronologic record under a special identifying stamp. This plan has been adopted in order that the services to the patients will be more closely correlated and integrated than sometimes was found to be the case when social service recording was done as a separate part of the history. We attempt to have these notes as brief as possible, relevant, significant, and helpful as regards the treatment of the patient as a whole.

A second practice which at this time is peculiar to our clinic is that of registering with the Social Service Exchange all patients who are admitted to the clinic. The Social Service Exchange functions as a central clearing house for the welfare agencies in the community. It makes possible the coordination of welfare work and the avoidance of duplication and possible conflicts. This being a free clinic, as would be expected, many of the patients have been known to other agencies and may be currently active with others. This registration practice has been found valuable from three points of view: Upon registration of a patient the exchange notifies us of all agencies to which the patient, his immediate family and collaterals, that is, parents, siblings, children, and in-laws have been known. We are thus enabled many times to secure from such agencies, data valuable in working out diagnosis and treatment. On the other hand when a patient has been registered by us, it becomes possible for an agency that may be active with the family in some other area or that may become active at some future time, to be cognizant of factors that may be of considerable importance, in their work with the case.

Thirdly, the registration slip which is attached to the unit history and becomes a part of it furnishes a teaching tool, an educational medium. In our clinic the social worker's services are available to the student in the work-up of his case which, as has been noted, includes the securing of a social history as complete as possible and a visit to the patient's home. The registrations and their possible or evident implications are discussed with the student and, if indicated, reports from agencies of records are secured for his use. Welfare organization is thus brought to the attention of the student. Interpretation of available com-

munity resources and the use that a clinic or physician may make of them, as well as interpretation of the lack of resources and weaknesses or defects in the welfare setup is, we feel of importance educationally to the medical student. The clinic's experience in regard to these procedures has seemed to justify them as constructive and fruitful from the point of view of patient, clinic, and community.

I have sought to give you a general idea of the role of a psychiatric social worker in a clinic and of how we are attempting to function as such in this clinic.

TRANSACTIONS OF ORLEANS PARISH MEDICAL SOCIETY

CALENDAR

June 3. Orleans Parish Medical Society Board of Directors, 8 p. m.
Clinico-pathologic Conference, Hotel Dieu, 8:15 p. m.

June 4. Eye, Ear, Nose and Throat Staff, 8 p. m.

June 5. Clinico-pathologic Conference, Charity Hospital and L. S. U. Medical Center, 2 p. m.
Hutchinson Memorial Clinic Staff, 8 p. m.
Mercy Hospital Staff, 8 p. m.

June 6. Clinico-pathologic Conference, Touro Infirmary, 11:15 a. m. to 12:15 p. m.

June 10. Orleans Parish Medical Society, 8 p. m.

June 11. Eye, Ear, Nose and Throat Society, 8 p. m.

June 12. Clinico-pathologic Conference, Charity Hospital and L. S. U. Medical Center, 2 p. m.
Touro Infirmary Staff, 8 p. m.

June 17. Hotel Dieu Staff, 8 p. m.

June 18. Charity Hospital Medical Staff, 8 p. m.

June 19. Clinico-pathologic Conference, Charity Hospital and L. S. U. Medical Center, 2 p. m.
Charity Hospital Surgical Staff, 8 p. m.
The Orleans Tuberculosis Hospital Staff, 8 p. m.

June 20. Clinico-pathologic Conference, Touro Infirmary, 11:15 a. m. to 12:15 p. m.

June 21. I. C. R. R. Hospital Staff, 12 noon.
New Orleans Dispensary for Women and Children Staff, 8 p. m.

June 25. Baptist Hospital Staff, 8 p. m.

June 26. Clinico-pathologic Conference, Charity Hospital and L. S. U. Medical Center, 2 p. m.
French Hospital Staff, 8 p. m.

June 27. Clinico-pathologic Conference, Touro Infirmary, 11:15 a. m. to 12:15 p. m.

June 28. L. S. U. Faculty Club, 8 p. m.

During the month of May, the Society held one regular scientific meeting and a special meeting with the New Orleans Tuberculosis Committee.

At the regular meeting held May 13, the following program was presented:

1. Biographical Sketch: Dr. Thomas Hunt.
   By invitation.....Mr. Rudolph Landry.
2. Preliminary Report: Prostatic Hyperplasia and its Response to Diethylstilbestrol and Diethylstilbestrol-Diproprionate.
   By.....Drs. P. Jorda Kahle and Emile Maltry, Jr.
3. Further Studies in the Cause of Blindness in Louisiana.
   By.....Dr. H. F. Brewster.
   Ten-year Survey of Luetic Lesions of the Eye, Ear, Nose and Throat.
   By.....Dr. W. E Kittredge.
   Kodachrome Clinic of External Eye Diseases.
   By.....Drs. Smith, Clark and Beil.
   Glaucoma—The Responsibility of the General Physician.
   By.....Dr. M. Carl Wilensky.
   Acute Eustachian Tube Obstruction.
   By.....Dr. E. Garland Walls.

The following program was presented at the joint meeting of the Orleans Parish Medical Society with the New Orleans Tuberculosis Committee:

The Pathogenesis and Pathology of Pulmonary Tuberculosis.
By.....Dr. Edward L. Burns.
The Early Diagnosis of Tuberculosis from the Standpoint of the Pediatrician.
By.....Dr. Emile Naef.
The Early Diagnosis of Pulmonary Tuberculosis.
By.....Dr. M. W. Miller.

AMENDMENTS TO CHARTER AND BY-LAWS

At the general meeting of the Society held Monday, May 13, the following amendments to the By-Laws were adopted:

1. That the retiring president be a member of the Board of Directors for the succeeding year without having to be elected.
2. That a President-elect be elected to take office one year later.
3. Delegates be elected at general election of officers by secret ballot. In this connection

the polls will remain open all day. Increase the pay of election tellers from $5.00 to $10.00.

4. Allow for absentee voting.

The Louisiana Chapter of the National Gastroenterological Association and the Orleans Parish Medical Society attended the meeting of the staff of the Marine Hospital, Thursday, May 9, at 8 p. m. The program was as follows:

1. Surgical Aspects of Gastric and Duodenal Ulcer, by Dr. J. D. Lane. Discussion by Drs. Isidore Cohn and James T. Nix.

2. Surgical Aspects of Gallbladder Disease: Review of 300 Cases, by Drs. Urban Maes and S. Romano. Discussion by Drs. Alton Ochsner and Mims Gage.

3. Experimental Work on Dogs Which May Throw Light on Clinical Amebiasis, by Dr. Ernest C. Faust. Discussion by Dr. J. G. Pasternack.

The following doctors were elected to membership in the Society: Active—Drs. John J. Hallaron, John Morgan Lyons, Richard M. Street. Intern—Drs. Vance J. Elliott and Paul L. Getzoff.

The Secretary reports with regret the loss of Dr. John A. Devron, one of the Society's active members.

NEWS ITEMS

Dr. H. Aubrey White, Alexandria, was elected president of the Louisiana State Pediatric Society at the twelfth annual meeting held at the Roosevelt Hotel, Monday, April 22. Other officers elected were: Dr. Julian Graubarth, New Orleans, vice-president, and Dr. W. C. Rivenbark, New Orleans, secretary-treasurer.

Dr. P. J. Carter, New Orleans, was elected president, Dr. D. C. McBride, Alexandria, vice-president, and Dr. Earl C. Smith, New Orleans, secretary-treasurer of the Louisiana Gynecological and Obstetrical Society at the annual meeting held Saturday, April 20 at the Roosevelt Hotel.

Announcement has been made of the formation of an undergraduate honor society in the School of Medicine of Louisiana State University, under the sponsorship of a faculty committee consisting of Dr. B. I. Burns, Dean; Dr. Charles Midlo, and Dr. J. D. Rives. The fourth year membership is limited to the upper tenth of the senior class, and third year membership to the three highest ranking students in the Junior Class. The organization is known as The Circle.

Dr. Gilbert Anderson presented a paper on "Fungous Infections of the Brain" before the Harvey Cushing Society in Kansas City on May 1.

Dr. Urban Maes attended the meetings of the Society of Clinical Surgeons, and the American Surgical Association in St. Louis on April 29 and May 3.

Dr. H. J. Schattenberg has been elected to membership in the American Society for Experimental Pathology.

Dr. John Connell read a paper entitled "Advantages of Serum Transfusion Over Other Intravenous Medicaments" before the Arkansas State Medical Society in Fort Smith on April 17.

Dr. John H. Musser presented a paper before the Missouri Medical Society in Joplin, on May 1, entitled, "Treatment of Some Acute Contagious Diseases." Following this meeting Dr. Musser attended the meetings of the American Society of Clinical Investigation and the Association of American Physicians at Atlantic City, May 6-8.

Dr. George W. McCoy, Director of the Department of Preventive Medicine and Public Health in the Louisiana State University School of Medicine, attended the meetings of the American Epidemiological Society in Boston, April 26; the National Foundation for Infantile Paralysis, Inc., in New York, during the latter part of April; the Association for American Physicians in Atlantic City, May 7-8; the National Board of Medical Examiners in Washington, D. C., May 10; and the meeting of the U. S. P. Revision Committee in Washington, May 12-14.

Dr. Alton Ochsner gave a talk on acute cholecystitis before the Springfield, Missouri Medical Society on Saturday, April 27; he also presented a paper on thrombophlebitis before the Mississippi Chapter of the American College of Surgeons on May 13.

Drs. Mims Gage and Alton Ochsner attended the meeting of the Society for Clinical Surgery, which was held in St. Louis on April 29 and 30, and also the meeting of the American Surgical Association, which was held in St. Louis, May 1, 2, and 3. They presented a paper entitled, "The Prevention of Ischemic Gangrene Following Surgical Operations on the Major Peripheral Arteries by Chemical Section of the Cervicodorsal and Lumbar Sympathetics." Dr. Ochsner also attended some of the sessions of the Eighth American Scientific Congress, held in Washington, D. C., May 11-18.

Dr. Daniel J. Murphy addressed the Loyola student branch of the American Pharmaceutical Association at their annual banquet held May 2.

Dr. Hiram W. Kostmayer recently spoke before a meeting of the local district of the Louisiana

Federation of the Women's Clubs. He discussed the proposed state law regarding blood tests for syphilis in maternity cases.

Dr. George Feldner gave a talk on modern medicine at a recent meeting of the Grand Consistory of Louisiana held at the Scottish Rite Cathedral.

Dr. Charles J. Bloom recently addressed the South Mississippi Medical Society at Laurel. His subject was "Spastic Colitis in Infancy and Childhood."

Dr. Ambrose H. Storck recently addressed the Lauderdale County Medical Society at its meeting in Meridian, Miss. He discussed the "Diseases of the Gallbladder and Biliary Tract."

A paper on "The Analysis of Comparative Skin Reaction by Means of the Chi-square Statistic" was presented at the Texas Allergy Association, May 13, by Drs. Pabst, Boatner and Efron.

Drs. Maxwell E. Lapham, Charles C. Bass, Roy H. Turner, William A. Sodeman, and Grace A. Goldsmith recently attended out-of-state meetings of medical societies.

Dr. Frederick F. Boyce has been elected a Senior Fellow of the Southeastern Surgical Association.

HOSPITAL NEWS

Work on the eighty bed annex under construction at the Southern Baptist Hospital is progressing. The first two floors, which will serve as interne quarters, will be ready for occupancy July 1.

TREASURER'S REPORT

Bank balance, March 28, 1940	$5,340.51
April credits	$1,133.32
Total credits	$6,473.83
April expenditures	$1,058.07
Bank balance, April 30, 1940	$5,415.76

LIBRARIAN'S REPORT

During the first quarter of 1940, 220 volumes were added to the Library. Of these 142 were received by binding, 41 by gift, 2 by purchase and 35 from the New Orleans Medical and Surgical Journal. New titles of recent date have been listed in the Bulletin and in the Journal.

The Library has loaned to doctors during the same time, 3,392 books and journals or more than 6 to each member of the Society. An additional 3,162 items have been loaned to students for overnight use, bringing the total number of books and journals circulated to 6,554, the largest quarterly circulation in the history of the Library.

Members of the staff have collected material on 39 subjects during the quarter. This reference work, it should be noted, is in addition to the great use of the Library facilities within the reading rooms for calls which can be filled immediately by consultation of the indices or the card catalog.

Edwin L. Zander, M. D.,
Secretary.

LOUISIANA STATE MEDICAL SOCIETY NEWS

CALENDAR

PARISH AND DISTRICT MEDICAL SOCIETY MEETINGS

Society	Date	Place
Bi-Parish	First Wednesday in June	Jackson
East Baton Rouge	Second Wednesday of every month	Baton Rouge
Morehouse	Second Tuesday of every month	Bastrop
Orleans	Second Monday of every month	New Orleans
Sabine	First Wednesday of every month	
Second District	Third Thursday of every month	

REPORT OF THE HOUSE OF DELEGATES TO THE GENERAL ASSEMBLY OF THE LOUISIANA STATE MEDICAL SOCIETY SIXTY-FIRST ANNUAL SESSION

New Orleans, April 22-24, 1940

There were two meetings of the House of Delegates held during the 1940 session of the State Society, one on April 22 and one on April 24.

Reports containing recommendations were acted upon as follows:

Report of President

1. Consideration of question of full time secretary: Motion was made and carried that the Chairman of the House appoint a committee of five to consider this question and report to the Executive Committee for final action.

2. Consideration of representation and control of health agencies by the Louisiana State Medical Society and fostering legislation toward that goal: Motion was made and carried that this recommen-

dation be adopted and referred to the Legislative Committee.

3. Consideration of election of president-elect by popular vote: Motion was made and carried that this question be referred to the Executive Committee for action.

4. Instruct Secretary to write to the State Board of Health and the Committee on Medical Education, thanking them for conducting refresher courses; and to the Journal Committee and Editors of the Journal for work done: Motion was made and carried that this recommendation be adopted.

Report of Committee on Cancer

1. To reaffirm the activities of the Cancer Committee: Motion was made and carried that the work of the Cancer Committee be continued.

2. To appropriate two hundred dollars ($200.00) for expenses for the year 1940: Motion was made and carried that this recommendation be referred to the Budget and Finance Committee.

3. That the Secretary-Treasurer write a letter to the newspapers in Alexandria, Bossier City, Lake Charles, Monroe and Shreveport which have published articles on cancer control and to the radio stations in Alexandria, Lake Charles, Monroe, Baton Rouge, and New Orleans which have given time for radio talks on cancer, thanking them for their cooperation. It is also recommended that a letter of thanks be sent by the Secretary-Treasurer to Dr. J. A. O'Hara, President of the Louisiana State Board of Health, for the donation of space in the Journal for the publication of monthly articles on the subject of cancer: Motion was made and carried that this recommendation be adopted.

4. That the Cancer Committee be authorized to make a study of the facilities for treatment of cancer patients in the state and make a report to the Executive Committee for consideration and action: Motion was made and carried that this recommendation be accepted.

Report of Committee on Maternal Welfare

1. That the incoming administration be requested to appoint at least one physician on the State Hospital Board: Approved.

2. That the work of this committee be continued and that the incoming President be requested and empowered to appoint the members of the Committee on Maternal Welfare: Motion was made and carried that the work of this committee be continued.

3. That the Committee on Maternal Welfare be established as a standing committee of the State Society: Motion was made and carried that the By-laws be amended so as to make the Maternal Welfare Committee a standing committee of the Society.

4. The committee recommends that the House of Delegates give this matter (routine Wassermann or other suitable test for syphilis on every pregnant woman) its earnest consideration, with reference to the proper committee of the Society, if deemed advisable: Motion was made and carried that the Louisiana State Medical Society go on record as continuing to advise the use of the Wassermann reaction in all pregnant women.

Report of Committee on Mental Health

1. A psychopathic department in Charity Hospital in New Orleans, with a qualified psychiatric, medical and nursing staff and adequate and modern equipment for the observation of patients and the treatment of temporary mental conditions: Motion was made and carried that this, as well as the other six recommendations made by the Committee on Mental Health be referred to the committee which will confer with Mr. Jones in regard to management of state institutions.

2. The development of some centralizing medical commission with supervisory capacity over all state hospitals, homes and colonies. The institution of civil service in the medical staffs of these institutions.

3. Increase and improvement in the facilities of the Feebleminded Colony.

4. Special provisions for the care of epileptics.

5. Provide for licensing of private hospitals to receive mental cases and establish suitable minimum standards of equipment and personnel for these hospitals, with proper supervision by the same commission that supervises the state hospitals.

6. Provide some means for country judges to have access to trained psychiatric advice.

7. Provide a psychiatric assistant for the coroners of large towns.

Report of Special Committee to Study Plan Proposed by the Louisiana State Board of Health for Venereal Disease Control

1. Appointment of a new Committee on Venereal Disease Control: Motion was made and carried that the report with recommendation, be adopted.

Report of Committee on Resolutions

1. That a copy of these resolutions be incorporated in the minutes of the meeting, a copy be given to the press, and a copy to the Bulletin of the Orleans Parish Medical Society and to the New Orleans Medical and Surgical Journal: Motion was made and carried that the report be accepted and the recommendations contained therein be carried out.

Report of Louisiana State Board of Medical Examiners

1. That Dr. E. L. Leckert, whose term expires in August, 1940, be recommended for reappointment to succeed himself: Motion was made and carried that Dr. Leckert be recommended. Motion was also made and carried that the name of Dr. E. L. Zander be recommended as an alternate.

The following reports which did not contain recommendations were accepted as presented: Re-

ports of Secretary-Treasurer, Council, Councilors, Delegate to 1939 meeting of American Medical Association, Committees on Care of the Indigent Physician, Health and Public Instruction, Hospitals, Journal, Medical Defense, Medical Education, Public Policy and Legislation, Scientific Work, Venereal Disease Control, Walter Reed Memorial; Advisory Committee to Woman's Auxiliary and Committee to Prepare a History of the Louisiana State Medical Society.

A committee was appointed by the Chairman to draw up resolutions of sympathy and send to Dr. Vaughan's widow.

Dr. E. C. Ferguson, Fraternal Delegate from Texas, was welcomed to the meeting and made a short talk, bringing greetings from his state association.

A communication concerning the Eighth American Scientific Congress to be held in Washington in May, 1940, under the auspices of the Government of the United States, received from Secretary Cordell Hull, was presented. Motion was made and carried that the communication be received and the President of the Society nominate, at any opportune moment, some men qualified and whom he deems would like to attend, to represent the Society.

A resolution was introduced, concerning appointment of provisional administrators for the state hospitals, pending passage of mature legislation. It was stated, when offered, that it was desired that this resolution supplement the president's plan and be referred to the Legislative Committee. Motion was made and carried that the resolution be accepted.

Motion was made and carried that a Committee on Child Health be appointed.

Motion was made and carried that the President appoint a Committee on Tuberculosis.

Amendments to the Charter, Constitution and By-laws, as offered by a special committee from the Executive Committee, deleting the phrases indicating, as one of the purposes of the Society, guarding and fostering material interests of its members, was presented. Motion was made and carried that proper steps be taken to make the changes suggested in the Charter, Constitution and By-laws.

Motion was made and carried that the House of Delegates go on record as condemning, in general, the activities of the State Hospital Board as now constituted and that Governor-elect Jones be notified of this action for his guidance.

A bill in reference to the sale, gift, barter, exchange or distribution of amytal, luminal, veronal, etc., was presented and motion was made and carried that this bill be adopted with the recommendation that it be referred to the Legislative Committee.

Motion was made and carried that the suggestion that three scientific sections instead of two be held simultaneously at the annual meetings of the Society be referred to the Executive Committee and that steps be taken to amend the constitution, if the plan is thought advisable by the Executive Committee.

Mrs. Harry Thompson, Commander of the Louisiana Division of the Women's Field Army of the American Society for the Control of Cancer, was granted the privilege of the floor and she thanked the doctors for their cooperation in the work of the Women's Field Army and requested that they continue to support this work.

Motion was made and unanimously carried that the next meeting be dedicated and named the Fred J. Mayer meeting of the Louisiana State Medical Society.

The following officers were elected:

President-elect: Dr. King Rand.

First Vice-President: Dr. H. Ashton Thomas.

Second Vice-President: Dr. D. J. Murphy.

Third Vice-President: Dr. D. T. Martin.

Secretary-Treasurer: Dr. P. T. Talbot.

Councilor First District: Dr. H. E. Bernadas.

Councilor Second District: Dr. D. N. Silverman.

Councilor Fourth District: Dr. M. D. Hargrove.

Councilor Fifth District: Dr. W. A. Rodgers.

The following members of committees were elected:

Scientific Work: Dr. P. T. Talbot, Chairman; Drs. A. E. Fossier and F. E. LeJeune.

Public Policy and Legislation: Dr. Roy B. Harrison, Chairman; Drs. H. B. Alsobrook and Rhett McMahon (and President and Secretary of Society).

Journal: Drs. L. J. Menville and W. H. Perkins.

Medical Defense: Dr. Chaillé Jamison, Chairman.

Health and Public Instruction: Dr. F. R. Gomila. Chairman; Drs. M. H. Foster, J. Q. Graves, J. K. Griffith and D. T. Martin.

Hospitals: Dr. J. T. Nix, Chairman; Drs. J. L. Scales, J. E. Walsworth, L. B. Crawford and L. O. Clark.

Delegate to A. M. A. 1941-42: Dr. L. J. Menville.

Alternate to A. M. A. 1940-41: Dr. George Wright.

Alternate to A. M. A. 1941-42: Dr. C. L. Peacock.

Chairman, House of Delegates: Dr. Val H. Fuchs.

Vice-Chairman, House of Delegates: Dr. A. W. Martin.

Invitation was accepted to hold the 1941 meeting in Shreveport.

Respectfully submitted,

P. T. Talbot, M. D.
Secretary-Treasurer

COMMITTEE ON MEDICAL DEFENSE

There have been two cases presented to the Committee on Medical Defense since the 1939 meeting of the State Society. These were submitted by the Orleans Parish Medical Society, for two of their members, in September, 1939. All material concerning these cases was referred to our attorney who advised that steps would be taken to protect the doctors in question.

In June, 1939, we were advised by our attorney that he had filed exceptions on behalf of a doctor of Bogalusa, whose case was referred to him in March of the same year.

On October 26, 1939, we received a communication from our attorney advising that his exceptions of no cause of action, filed for one of our members from Rapides Parish, had been maintained and that the plaintiff had been allowed an appeal to the Court of Appeal. He stated also that he would prepare the necessary material and orally argue the case when it is tried in an effort to protect the doctor's interests in every way possible.

Attached to the original report is a financial report of the Medical Defense Savings Account for 1939 and also a list of the securities held in the Trust Department of the Whitney National Bank for the Medical Defense Fund, as of December 31, 1939.

Respectfully submitted,
S. Chaillé Jamison, M. D., Chairman.

REPORT OF COMMITTE ON RESOLUTIONS 1940

Whereas, The Louisiana State Medical Society has enjoyed one of its outstanding and successful meetings, and

Whereas, The success of this meeting is due to cooperation of several individuals and organizations, We therefore offer the folowing resolutions of cooperation:

1. To Dr. H. Ashton Thomas, General Chairman of the Committee on Arrangements, for his generous and untiring efforts which have contributed greatly to the success of the meeting.

2. To the Orleans Parish Medical Society, host of the meeting, for their splendid cooperation and the excellent manner in which the convention was conducted.

3. To the efficient staff of the Secretary's office and the Secretary-Treasurer whose careful preparation of the details of the meeting contributed much to its smooth operation.

4. To Dr. King Rand, Chairman of the House of Delegates, for the efficient and orderly manner in which he conducted the meeting of the House of Delegates.

5. To the Woman's Auxiliary of the Louisiana State Medical Society whose wholehearted support and interest added considerably to the meeting.

6. To the scientific and commercial exhibitors whose splendid displays greatly enhanced the excellence of the meeting.

7. To the press of New Orleans for their interest and assistance in giving space for news of the meeting and of various personages in attendance.

8. To Mr. Sam Fowlkes, convention manager, the personnel of his office, and the Roosevelt Hotel for the many courtesies extended and for their cheerful and willing attention to the innumerable calls for assistance.

9. To the Association of Commerce for their invaluable assistance at the registration desk.

10. To the members of the State Society who attended the meeting and whose interest and enthusiasm made the meeting a success.

We recommend that a copy of these resolutions be incorporated in the minutes of the meeting, a copy be given to the press, and a copy to the Bulletin of the Orleans Parish Medical Society and to the New Orleans Medical and Surgical Journal.

Respectfully submitted,
J. W. Faulk, M. D., Chairman.
R. C. Young, M. D., Member.
A. W. Martin, M. D., Member.

STATE MEDICAL GOLF TOURNAMENT

The annual golf tournament of the Louisiana State Medical Society was held at the Metairie Golf Club, New Orleans, on April 22-24. The winning scores and awards were as follows:

Low Gross: Dr. C. Gordon Johnson, New Orleans, 80, golf bag; Dr. Joseph D'Antoni, New Orleans, 81, radio; Dr. F. Temple Brown, New Orleans, 83, book.

Low Net: Dr. Ralph Riggs, Shreveport, 69, Boston bag; Dr. Frederick Boyce, New Orleans, 69, radio; Dr. M. D. Hargrove, Shreveport, 71, sport shirt.

Blind Holes: Dr. Albert Morgan, Crowley, first, weekend bag; Dr. A. D. Mangham, Elizabeth, second, zipper bag; Dr. Hugh Lawson, New Orleans, third, six golf balls.

Best Poker Hand on First Nine Holes: Dr. Kermit Brau, New Orleans, first, sterilizer; Dr. Jerome E. Landry, New Orleans, second, one quart Bourbon.

Best Poker Hand on Second Nine Holes: Dr. C. Herman Weinberg, New Orleans, first, fountain pen; Dr. C. P. Rutledge, Shreveport, second, sport slacks.

Hole-in-one on 12th Hole: Dr. Chester Fresh, New Orleans, 9½ feet from hole, blood pressure apparatus.

Hole-in-one on 17th Hole: Dr. Val Fuchs, New Orleans, 6½ feet from hole, thermos bowl.

Best Score on Five Par Holes: Dr. W. C. Rivenbark, New Orleans, first, reading lamp; Dr. Jack Strange, New Orleans, second, electric fan; Dr. J. H. Musser, New Orleans, third, six golf balls.

Kickers: Dr. W. P. Bradburn, New Orleans, 78, onyx desk set; Dr. Ralph Christman, New Orleans, 80, sport shirt; Dr. H. Ashton Thomas, New Orleans, 80, Herbsaint; Dr. J. Kelly Stone, New Orleans, 80, six golf balls; Dr. Charles B. Odom, New Orleans, 90, six golf balls; Dr. L. A. Fortier, New Orleans, 90, sport shirt.

Golf prizes were given with the compliments of the following firms: American Drug Store, Baumann's Surgical, Graff's, D. H. Holmes, Katz & Besthoff, Ltd., Labiche's, Inc., Legendre's, Inc., Loubat's, I. L. Lyons, Maison Blanche, J. A. Majors, Meyer Bros., McKesson-Parker-Blake, Porter's, State Drug Store, Surgical Equipment Co., Van Pelt and Brown, of Richmond, Va., Walgreen's, and Waterbury's Drug Store.

AVOYELLES PARISH REPORT ON GROUP PRACTICE UNDER FARM SECURITY ADMINISTRATION

As a matter of record and to show other country doctors throughout the United States the results of voluntary group practice for the F. S. A., the following report speaks for itself:

Beginning April 1, 1939, eleven of the thirteen doctors in Avoyelles Parish, Louisiana, agreed to serve the F. S. A. members who wanted to belong to the medical group. Of 400 families in the F. S. A., approximately 250 joined. They were assessed on amount varying from $10.00 to $24.00 per year for medical services and drugs. The entire amount was put into a fund from which the doctor bills were to be paid. The patients were to have their choice of any doctors belonging to the group and merely had to present their F. S. A. medical card to get treatment and drugs.

The doctors had to belong to the parish medical society to be eligible. Regular fees were charged as follows: Office visit, including medicine, $2.50; house call, including medicine, $3.50, twenty five cents additional for each mile after two miles; obstetrical cases $25.00; minor survey $5.00; fractures $15.00 to $25.00.

The doctors agreed to give it a fair trial for a period of one year. The bills were sent to the representative of the doctor's group every month for checking, who in turn sent them to the secretary of the F. S. A.

The total amount in the fund was $3200.00; this was divided into 12 installments of $266.50 each. The total doctors' bills were added together and the doctors received, in proportion, their share of the $266.50. The total bills submitted were $5800.00. The total amount paid was $3200.00, leaving a collection average of 58 per cent. Of this amount the doctor had to pay for the drugs which in most cases amounted to 33 per cent of the collected amount. That left the doctor about 36 per cent average collections. The average doctor booked $527.00 for the year and collected $291.00, of which $100.00 went to the druggist.

At the last meeting of the Society it was the unanimous opinion of the doctors that they could not make a living in their private practice collecting 36 per cent of the work done and therefore did not feel justified in continuing the F. S. A. practice any longer. As a whole the F. S. A. patients did not abuse the fact that they could get medical services at any time. The doctors tried to keep unnecessary visits at a minimum and do as few house visits as possible.

The only solution would be to increase the amount charged each family which would not be possible for this group.

The doctors decided there was not any advantage over routine private practice; in fact they all preferred to charge and collect from each patient as an individual.

OUACHITA PARISH MEDICAL SOCIETY

The regular monthly meeting of the Society, held at the Frances Hotel, May 3, 1940, at 5:30 p. m., was called to order by the president, Dr. D. T. Milam.

The following papers were presented by members of the staff of Louisiana State University School of Medicine: "The Surgical Management of Biliary Tract Disease" by Dr. F. F. Boyce, Assistant Professor of Surgery; "The Treatment of Pneumonia" by Dr. J. O. Weilbaecher, Jr., Assistant Professor of Medicine.

A banquet was then served after which the scientific program was resumed: "The Management of Stubborn Urinary Tract Infections" by Dr. H. T. Beacham, Assistant Professor of Urology; "Toxemias of Pregnancy" by Dr. R. E. Arnell, Senior Assistant Professor of Obstetrics and Gynecology.

L. L. Titche, M. D., Sec.

COMPONENT SOCIETY OFFICERS 1940

FRANKLIN PARISH

President: Dr. J. N. Bostick, Gilbert.

Vice-President: Dr. N. E. McElwee, Jr., Crowville.

Secretary-Treasurer: Dr. R. E. Applewhite, Winnsboro.

Delegate: Dr. H. T. Rogers, Winnsboro.

ST. LANDRY PARISH

President: Dr. E. L. Landry, Opelousas.

Vice-President: Dr. J. J. Stagg, Eunice.

Secretary-Treasurer: Dr. S. J. Rozas, Opelousas.

NEWS ITEMS

At the recent meeting of the Louisiana-Mississippi Ophthalmological and Otolaryngological Society, Dr. Francis E. LeJeune, of New Orleans, retired as president and was succeeded by Dr.

D. C. Montgomery, of Greenville. Dr. H. N. Blum, of New Orleans, was selected as secretary.

The annual meeting of the Louisiana Coroners' Association was held Monday, April 22, just preceding the meeting of the Louisiana State Medical Society. Dr. C. Grenes Cole was re-elected president; Dr. J. B. Hall, of Bossier, was chosen first vice-president; Dr. C. J. Barker, Thibodaux, second vice-president, and Dr. L. L. Ricks, Independence, secretary-treasurer.

Dr. Ambrose H. Storck recently addressed the Lauderdale County Medical Society at its meeting in Meridian, Miss. The subject of his talk was "Diseases of the Gallbladder and Biliary Tract."

It has been announced in New Orleans papers that Dr. Sam Kerlin has been appointed by Governor Jones as Superintendent of the Shreveport Charity Hospital.

Dr. Walter J. Otis and Dr. P. H. Jones, both of New Orleans, are two of the seven new appointees to the board of eight of the East Louisiana State Hospital.

MEDICAL LIBRARY ASSOCIATION

The forty-second annual meeting of the Medical Library Association will be held at the University of Oregon Medical School, Portland, June 25-27, under the presidency of Col. Harold W. Jones of the Army Medical Library, Washington, D. C. Hotel headquarters will be at the Heathman. The program will include talks on the literature of epidemiology of plague, tularemia and Rocky Mountain spotted fever; a symposium on investigations in local medical history, and problems in bibliography based on a study of terminology in the field of nutrition.

AMERICAN HEART ASSOCIATION

The annual meeting of the American Heart Association will be held in New York City, June 7-8, at the Hotel Roosevelt. The first day of the meeting will be devoted to a program of subjects relative to the heart; the second day meeting will be under the auspices of the Section for the Study of the Peripheral Circulation.

AMERICAN CONGRESS OF PHYSICAL THERAPY

The nineteenth annual scientific and clinical session of the Congress will be held September 2-6, 1940 at the Hotel Statler, Cleveland, Ohio. The mornings will be devoted to the annual instruction course, enabling attendance at both the course and scientific sessions which will be given in the afternoons and evenings.

PAN-AMERICAN CONGRESS OF OPHTHALMOLOGY

Plans for a Pan-American Congress of Ophthalmology to be held at the Hotel Cleveland, Cleveland, Ohio, October 11-12, have been announced. The congress will be sponsored by the American Academy of Ophthalmology and Otolaryngology, an organization of more than 2,500 specialists in diseases of the eye, ear, nose and throat, which will hold its annual convention immediately preceding the Pan-American gathering.

The Medical Association of the State of Alabama begs to call to your attention the following important resolution adopted by it on April 18, 1940:

WHEREAS, There is a growing tendency to patent drugs in the name of universities and foundations in connection with universities; and

WHEREAS, These patents are presented to the institutions by the discoverers; and

WHEREAS, The discoverers of the products are usually medical men; and

WHEREAS, The effect of the patents is to increase the price of the drugs because of the royalties imposed by the said foundations; and

WHEREAS, A considerable proportion of patients in need of the new products are prevented from buying them by reason of the necessarily high prices asked; and

WHEREAS, This hardship is imposed upon the needy public through the acts of the discoverers under the guise of foundations:

BE IT RESOLVED, That The Medical Association of the State of Alabama condemns as unethical the patenting of drugs or medical appliances for profit whether the patent be held by a physician or be transferred by him to some university or medical research foundation, since the result is the same, namely, the deprivation of the needy sick of the benefits of many new medical discoveries through the acts of medical men; and

BE IT FURTHER RESOLVED, That copies of these resolutions be sent to the leading medical associations and journals, to the leading medical colleges of the United States and Canada, and to the secretaries of all state medical associations as well as to that of the District of Columbia.

Douglas L. Cannon, M. D., Sec.

DEDICATION OF OSLER MEMORIAL AT BLOCKLEY

The old autopsy house where Osler worked at Blockley has been restored as the Osler Memorial Building, and will be dedicated on the grounds of the Philadelphia General Hospital, at Curie Avenue, near 34th and Pine streets, Philadelphia, at 2 p. m. on June 8, 1940.

Original furnishings, including the necropsy table, have been collected. The painting by Dean Cornwell, N. A., of New York, entitled "Osler at

old Blockley," later to be hung in the building, will be on exhibition during the celebration.

There are facilities in the building for the housing and preservation of relics of old Blockley, as well as Osleriana. The committee would welcome any additions to this collection.

A cordial invitation is extended to those who are interested, and especially those who are planning to attend the American Medical Association Convention in New York City, June 10-14.

HEALTH OF NEW ORLEANS

The Department of Commerce, Bureau of the Census, reported that for the week closing April 13, there were listed 144 deaths in the City of New Orleans, one less than the previous week. Of these deaths, 79 occurred in the white population and 65 in the negro. Infant deaths this week were 10, 70 per cent of which were negro babies. The next week, which closed April 20, there were 145 deaths, one more than the previous week. Responsible for these deaths were 96 white people and 49 black; there were only nine infant deaths listed and, as happens rarely, the white babies died in greater number than the black. The week ending April 27 showed quite a drop in the number of deaths, only 120 being recorded, divided 81 white and 39 negro. There were eight children who died this week who were under one year of age. The following week the number of deaths was 135 with 12 infant deaths; the division for this week was 101 white and 34 negro. The last few weeks for which the figures are available show rather a sharp drop in the number of deaths. This may bring down the total death rate in the city which has, for the first eighteen weeks of the year, been considerably higher than last year. There have been so far 488 more deaths than in 1939.

INFECTIOUS DISEASES IN LOUISIANA

For the week terminating April 13, the fifteenth week of the year, the Bureau of Epidemiology of the Louisiana State Board of Health reported that syphilis, as is its habit, led all reported diseases with 168 cases. Other diseases which occurred in figures greater than ten included: 68 cases of pneumonia, 43 of whooping cough, 42 of pulmonary tuberculosis, 25 of influenza, 22 of cancer, 21 of gonorrhea, and 12 of chickenpox. Of the rarer diseases reported this week, there were three cases of tularemia and one of cerebrospinal meningitis. For the following week there were approximately the same number of cases of syphilis as in the preceding week, namely, 160. Other frequently reported diseases included 44 cases of pulmonary tuberculosis, 27 of pneumonia, 26 of gonorrhea, 13 of cancer, and 11 of trachoma. All of these eleven cases of trachoma were found in West Carroll Parish; evidently, there was an intensive survey of the eyes of the people in this parish. This is of interest because other cases might be found in neighboring parishes and throughout the state. Trachoma is virtually never recorded; the incidence in previous weeks has been zero for a long period of time. There were also listed a case of smallpox from Lafayette, two of typhus fever from Iberia, and one of cerebrospinal meningitis from Rapides. For the seventeenth week of the year, which closed April 27, there were recorded 135 cases of syphilis, 63 of whooping cough, 40 of pulmonary tuberculosis, 33 of pneumonia, 25 of cancer, 22 of gonorrhea, and 12 each of influenza and measles. Two cases of typhus fever were listed, one from Iberia and one from Lafayette Parish. The week which terminated May 4, there were recorded 184 cases of syphilis, 49 of pneumonia, 29 of pulmonary tuberculosis and cancer, 14 of influenza, and 13 of whooping cough. Again, two cases of typhus fever were placed in the weekly reports, one in Acadia and one in Orleans Parish. Two cases of meningitis were found, one arising in Avoyelles and one in Claiborne Parish. For the nineteenth week of the year, which closed May 11, there were listed 164 cases of syphilis, 45 of pneumonia, 39 of cancer, 34 of pulmonary tuberculosis, 31 of whooping cough, 19 of gonorrhea, 12 of chickenpox, and 11 of measles. Two instances of tularemia were discovered, one in Acadia and one in East Baton Rouge. It is pleasing to report that for the past five weeks at no time have there been as many as five cases of typhoid fever reported and for this week there was only one.

JOHN ALEXANDER DEVRON
(1874-1940)

Dr. John A. Devron died in New Orleans on Monday, May 13, after a comparatively short illness. For many years he had been a loyal and faithful member of both state and parish medical societies.

Dr. Devron graduated from Tulane University in 1896 and since 1924 had been connected with the Department of Dermatology.

The tragic deaths of both of his two doctor sons undoubtedly played a part in hastening his last illness. An unaffected, kindly gentleman, his character endeared him to his many friends and patients.

WOMAN'S AUXILIARY
Louisiana State Medical Society

Mrs Aynaud F. Hébert was elected president for 1941 of the Woman's Auxiliary to the Louisiana State Medical society at the meeting held in New Orleans, April 24, 1940. Mrs. Roy Carl Young, of Covington, was inaugurated president for this year. Mrs. S. M. Blackshear, president, presided at the meeting. Other officers elected were Mrs. Joseph E. Heard, of Shreveport, first vice-president; Mrs. M. H. Foster, of Alexandria, second vice-president;

Mrs. Courtland P. Gray, of Monroe, third vice-president; Mrs. Willard Ellender, of Houma, fourth vice-president; Mrs. P. A. Donaldson, of Reserve, recording secretary, and Mrs. M. C. Wiginton, of Hammond, treasurer.

One of the highlights of the meeting was the presentation of small gold pins to the past presidents of the auxiliary. Mrs A. D. Tisdale, of Monroe, made the presentation.

The past presidents in order of their seniority of office are Mrs. Oscar Dowling, who organized the auxiliary and was its first president; Mrs. A. A. Herold, of Shreveport; the late Mrs. H. W. E. Walther; Mrs. R. T. Lucas, of Shreveport; Mrs. John Musser, of New Orleans; Mrs. T. H. Watkins, of Lake Charles; Mrs. Hermann B. Gessner, of New Orleans; Mrs. J. B. Vaughan, of Monroe; Mrs. George Feldner, of New Orleans, and Mrs. Fred G. Ellis, of Shreveport.

The meeting opened with an invocation by Rev. John J. Adams, followed by a welcome address by Mrs. Charles R. Hume, to which Mrs. Erwin L. Gill, of Shreveport, responded.

The musical program for the day was given by Mrs. Plauché Villere at the piano and Miss Edith B. Wolfe, soprano. Benediction was then offered by Rabbi Mendel Silber.

Councilors chosen are Mrs. George D. Feldner and Mrs. Roy Harrison, of New Orleans, first and second congressional districts, respectively; Mrs. Robert Young, Abbeville, third congressional district; Mrs. Erwin Gill, Shreveport, fourth congressional district; Mrs. A. D. Tisdale, Monroe, fifth congressional district, and Mrs. A. W. Martin, Bogalusa, sixth congressional district. (Reprinted from the New Orleans Item).

BOOK REVIEWS

Treatment of Some Common Diseases (Medical and Surgical): By Various Authors, Edited by T. Rowland Hill, M. D. (Lond.), M. R. C. P. (Lond.). Baltimore, The Williams and Wilkins Company, 1939. Pp. 398; 90 illus. Price $5.00.

This book, prepared by members of the honorary staff of the Southend-on-Sea General Hospital, aims to present to the general practitioner the modern treatment of some common or important disorders. It is not designed to be a systematic text or work of reference, but rather a series of practical monographs to be read with ease and enjoyment.

The following subjects are discussed: Angina pectoris, heart failure, pleurisy, broncho-pulmonary suppuration, anemia, cerebral vascular disease, digestive disorders of infancy and childhood, prophylactic treatment by active immunization, malignant disease of the pharynx, obstructive jaundice due to malignant disease, hemorrhage from the intestinal tract, enlargement of the prostate gland, infections of the face and neck, suppurative lesions about the knee joint, head injury and its complications, uterine hemorrhage, delay in labor, shock during anesthesia, pre-anesthetic medication, x-rays in the treatment of malignant disease, injuries to the skin and mucous membrane in radiation therapy, moles, warts, and angiomata, ocular complications of some common disorders of the skin, earache, dental caries, postoperative wound complications.

In some sections treatment alone is considered; in others, and these are superior, emphasis is placed on the clinical picture and accurate diagnosis. The allotment of space is poorly apportioned. The treatment of cardiac infarction is dismissed in less than one page, whereas twenty pages are devoted to the technical problems involved in the surgery of pharyngeal malignancies. The inclusion of such subjects as suppurative disease about the knee joint, radiation injuries to skin and mucous membranes, and ocular complications of some common skin disorders, and the omission of such important topics as the common skin diseases and infections of the hand detract greatly from the value of the book.

In general, the therapy recommended is well recognized and sound. However, in many chapters, discussion is far too brief and superficial. In addition, drugs are often called by their British proprietary names alone, without statement as to their exact nature.

There are 90 illustrations, including a photograph of the tombstone of Benjamin Jesty. The arteriograms demonstrating intracranial aneurysms are excellent; but a false impression of the efficacy of x-ray therapy in carcinoma of the bronchus is conveyed by other illustrations.

With more comprehensive one-volume texts on medicine, surgery, or treatment available to the general practitioner, this volume is not likely to attract many purchasers, especially in this country.

EDWARD MATTHEWS, M. D.

Relation of Trauma to New Growths, Medico-legal Aspects: By R. J. Behan, M. D. Baltimore, The Williams and Wilkins Company, 1939. Pp. 425. Price $5.00.

Dr. Behan's book is an unusual one. In it he has accumulated much of the evidence bearing on the subject of the relationship of trauma to neoplasms. Both the medical and legal aspects of this problem are presented. In this respect his book is a mine of information, a veritable library

that enables the interested reader to save days of bibliographic searching and reading.

The subject matter, originally only of academic significance, has assumed increasingly greater importance in recent years, paralleling the introduction and growth of social legislation and workmen's compensation laws in the various states. Dr. Behan has had wide experience as a medical expert in matters relating to injuries governed by these laws. From this experience, and from the knowledge obtained while he was writing his book on "Cancer," stems the present work. He dedicates his book "to the harrassed doctor" on the witness stand, and hopes through it to enable the medical profession to make better witnesses.

While the book goes a long way toward accomplishing this purpose, it is unfortunate that Dr. Behan has not given more generously of his own opinions. Usually he summarizes the positive and negative sides of a given problem from the medico-legal aspects, without thereupon stating his own views or coming to any conclusion. The reader is therefore left with a kind of "yes" and "no" feeling about the particular problem, as if the place for settling the question involved is to be another court of law. On the other hand this lack of definite conclusions probably results from the opinion, unexpressed but indicated between the lines, that each case must be decided on its own merits, with the issues to be clearly defined and not based on preposterous suppositions or ridiculous probabilities.

To accomplish these objectives, chapters are devoted to such interesting subjects as: changes in affected tissues; experimental traumatic cancer; effects of single trauma; the time factor and latent period; influence of trauma in changing a non-malignant into a malignant tumor; aggravation of growth already present; influence of trauma on metastases; effects of biopsy.

Dr. Behan recognizes the fact that there are two groups among doctors: One believes that there is no relationship between trauma and cancer; the other believes, and probably rightfully so, that an undetermined but yet a definite relationship can at times be shown to exist. Dr. Ewing has stated: "Traumas reveal more malignant growths than they produce." And: "So strong is the evidence against the purely traumatic origin of most cancers that one must assume the attitude that a malignant growth claimed to be traumatic arises not in normal but in previously altered tissues." Nevertheless, Dr. Behan cites example after example in which courts awarded damages based on the production, or aggravation, of cancer resulting in relationship to injury.

To guide medical thinking in these problems, Dr. Behan gives the following postulates:

1. There must be definite proof that the accident really happened.

2. A clear description of the exact injuries must be obtained.

3. It is necessary to prove that prior to the accident there was integrity of the injured part.

4. The trauma must be of sufficient severity to cause appreciable disturbance to the tissues.

5. Disturbances should be noticed in the injured area immediately after injury.

6. There should be a direct continuous bridging of symptoms in this area from the time of injury to the time the cancer is discovered.

7. The time factor must be considered, and the time for the development of the cancer must be within the realm of probability.

DANIEL M. KINGSLEY, M. D.

Health Officers' Manual: By J. G. Geiger, M. D., Dr. P. H., Sc. D., LL. D. Philadelphia and London, W. B. Saunders Company, 1939. Pp. 148; illus. Price $1.50.

This manual is a short descriptive account of the duties and functions of a health authority. Discussions are presented on the principles of organization of a Public Health Department, its obligations, responsibilities and technics. As such it is an excellent reference treatise.

As a health officers' handbook, implying a ready reference manual, it is somewhat disappointing not to find more detail in regard to such necessary references as technics in disinfection, disposal, pasteurization, immunization and statistics. These might well have been substituted for the slightly lengthy paragraphs on the philosophy of health control under each heading.

The sections on isolation, quarantine and school exclusion are just what the health officer wants to look up.

The book is highly informative and offers a concise resumé of public health work for physicians and laymen alike.

W. H. PERKINS, M. D.

You and Heredity: By Amram Scheinfeld. New York, Frederick Stokes Co., 1939. Pp. 434. Price $3.00.

The medical profession owes Dr. Scheinfeld a debt of gratitude for his outstanding work, both as an author and illustrator. He has simplified many complex conceptions of heredity in words and clever diagrams. He has publicized information which, if more generally known, would facilitate a better understanding of what the patient should expect of his ancestors as well as his physician.

Following a most readable explanation of conception, chromosomes and genes, the author analyzes, "What We Don't Inherit," that is, acquired characteristics. He then explains the genetics of sex, the Mendelian laws, color of eyes, hair and skin, as well as dominance and recessiveness in human features. The mechanism of multiple

births is discussed in words a high school student can easily understand. The Dionne quintuplets rightly receive their share of the honors.

The author then takes up, "The Black Genes," "Our Principal Enemies," "For Men Only," and other well titled chapters, which differentiate environment and heredity. Then follows summary tables showing the relation of diseases and defects to dominant, recessive, sex-linked, and other hereditary factors.

Dr. Scheinfeld's genetic analysis of famous living musicians should be of deep interest to physicians musically inclined. Of wider interest are the chapters on, "Sexual Behavior," "Race," "Ancestry," and "The Giddy Stork." If you are interester in the better understanding of human beings, read this book, and then read it again.

CHARLES A. BAHN, M. D.

The Patient's Dilemma: By Hugh Cabot, M. D. New York, Reynal & Hitchcock, 1940. Pp. 284. Price $2.50.

This book, on "The Quest for Medical Security in America," represents the expression of the author's philosophy resulting from his examination and study of a group of nationally important and extremely difficult and complicated economic, social and professional problems which the people of the United States are endeavoring to solve.

Dr. Cabot has produced an impressive treatise, clear and definite in many respects and persuasive far beyond other writings on the subject. Apparently he believes that, with daring and imagination, the American people can enlarge their medical-economic frontiers to a point they cannot now foresee.

The author knows that modern scientific medicine is very efficient and very expensive. He is aware of the fact that doctors and politicians are sharply divided in their views on the methods to be employed in solving the vital issues involved, and that both groups are surrounded by powerful organizations which are also divided. Therefore, the vast and important subject under discussion must be looked at in all its implications.

Dr. Cabot offers no evidence that he has sought or considered the opinions of the rank and file of doctors. He does not satisfactorily explain and define the terms good and inexpensive medical care. He does not state that most patients do not know what good medical care is, where to find it, what it costs and who will pay for it. He offers little hope that the practice of medicine, in America, will continue as a private, individual profession free from political meddling and domination.

If the Federal government is going to help in clearing up "The Patient's Dilemma" it must remain an aid to, and not the means of, assisting those in need.

Perhaps the effect of the current controversy over adequate medical care at the lowest cost will be wholesome because it might cause us to realize that there are significant elements in this question which no one has really thought out. Unless we get down to these points, the great and solemn referendum before us may be lost in an empty row between doctors, politicians and patients.

C. P. MAY, M D.

Medical Climatology; Climatic and Weather Influences in Health and Disease: By Clarence A. Mills, Ph. D., M. D. Baltimore, Charles C. Thomas, 1939. Pp. 296. Price $4.50.

The external factors of weather and climatic conditions that fundamentally affect human health and activity are presented. Suggestions are made as to the effect of these conditions upon human health and activity.

Mills discusses the use of natural and artificial climate in the treatment of disease.

The author is not dogmatic in his viewpoints and presents the subject matter in an interesting manner. This volume is a worth-while contribution to a phase of medicine which has received little attention.

SEBRON C. DALE, M. D.

PUBLICATIONS RECEIVED

The Commonwealth Fund, New York City: Chemotherapy and Serum Therapy of Pneumonia, by Frederick T. Lord, M. D., Elliott S. Robinson, M. D., Ph.D., and Roderick Heffron, M. D.

Duke University Press, Durham, N. C.: The Compleat Pediatrician, by Wilburt C. Davison, M. A., D. Sc., M. D.

Paul B. Hoeber, Inc., New York City: Treatment of War Wounds and Fractures, by J. Trueta, M. D.

Lea & Febiger, Philadelphia: Clinical Parasitology, by Charles Franklin Craig, M. D., M. A. (Hon.), F. A. C. S., F. A. C. P., Col., U. S. Army (Retired), D. S. M., and Ernest Carroll Faust, M. A., Ph.D.

The Macmillan Company, New York City: Frontier Doctor, by Urling C. Coe, M. D.

W. B. Saunders Company, Philadelphia: Minor Surgery, by Frederick Christopher, S. B., M. D., F. A. C. S.

The Williams and Wilkins Company, Baltimore: Combined Textbook of Obstetrics and Gynaecology, revised and rewritten by various authors. The Treatment of Rheumatism in General Practice, by W. S. C. Copeman, M. A., M. D., B. Ch. (Cantab.), F. R. C. P. (London). Principles and Practice of Aviation Medicine, by Harry C. Armstrong, B. S., M. D. Essentials of Psychiatry, by George W. Henry, M. D. Standard Methods of the Division of Laboratories and Research of the New York State Department of Health, by Augustus B. Wadsworth, M. D., Director. Cyclopropane Anesthesia, by Benjamin Howard Robbins, B. A., M. S., M. D. Electrocardiography by Chauncey C. Maher, B. S., M. D., and Paul H. Wosika, M. D., M. S.